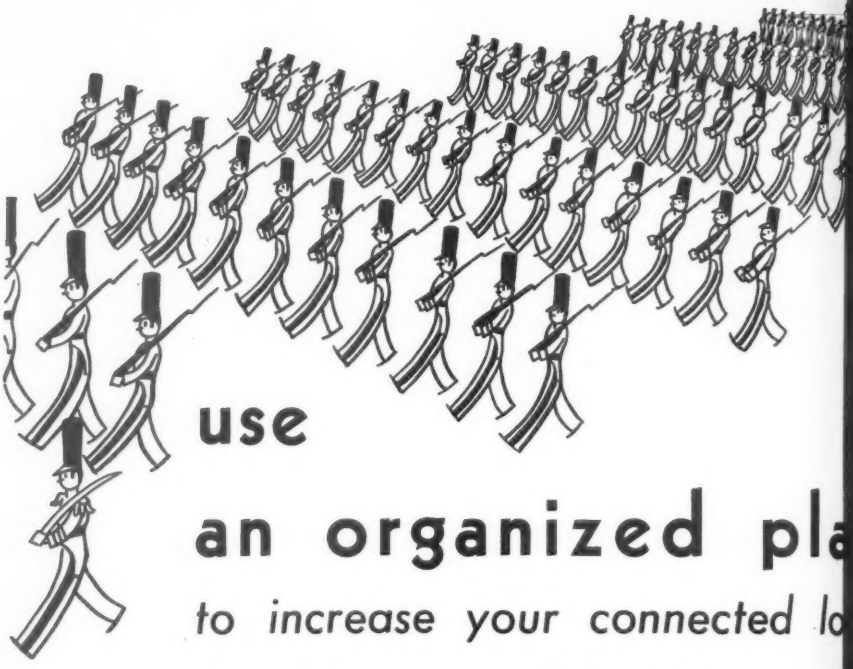
Public Utilities

FORTNIGHTLY

March 4, 1937

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS



use an organized pla

to increase your connected lo

Like an army reaching its objective because it concentrates on one predetermined plan, you will be able to increase your load if you specialize on this new, low-priced Silex glass coffee maker.

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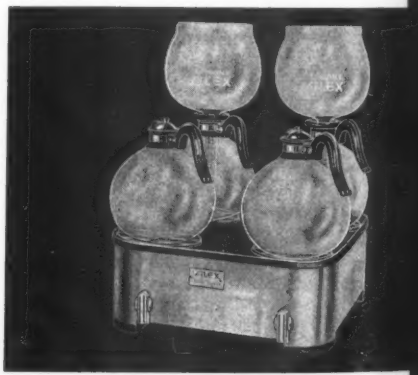

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llar-minded executives many companies have n able to take a big e off truck tire bills this r. They have cut costs already economical erations. They have omplished this by using new tire and a new thod of tire selection.

odrich, we believe, can e money for you, too. e would like to have u make tests on your n trucks. Any kind of ts you say. The tougher e job, the more sure are of demonstrating l savings.

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e new Goodrich Silver- wn is Triple Protected inst sidewall breaks l blow-outs. Statistics ow that 80% of prema- e failures occur in the dewalls—the "Failure Zone." A new Goodrich invention is designed to overcome these failures before they start!

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Write, wire or 'phone

Department T-121

The B. F. Goodrich Company, Akron, Ohio

Editor—HENRY C. SPURR
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH
Contributing Editor—OWEN ELY

Public Utilities Fortnightly

VOLUME XIX *March 4, 1937* NUMBER 5

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

Advertising Section

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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Pages with the Editors

"OH, monopoly is all right in its place," said a member of the newly formed "public power bloc" in the House of Representatives, when we asked him some questions about power pools and so forth. He added that he had nothing against a monopoly where it was "necessary in the public interest." We asked for an example of such justified monopoly (other than in the field of government business, of course) and he promptly replied:

"TELEPHONES! You've got to have territorial monopoly for telephones. Why, I remember some years back in my home town of L—— when a professional man had to have two telephones on his desk to keep in touch with all his clients and a busy merchant had to have three to get proper long-distance service."

CONCEDING that duplication of telephone facilities within the same community was demonstrable economic folly, we asked the worthy congressman if duplication of electric generating and distribution facilities within the same metropolitan area was not also wasteful; not in such a spectacular or irritating way, perhaps, as the three phones on the merchant's desk, but unnecessarily costly to somebody in the long run.

WELL, yes, he admitted that we might have something there. One has to consider expensive duplication of underground conduits, switch gear, and generating equipment; the mere expense of one service getting out of the way of the other was an item. He finally agreed to the proposition that in the absence of extenuating circumstances (such as in Cleveland where a dual power system grew up naturally and without undue conflict), the metropolitan area of a city is the logical basis for a territorial monopoly in electric service.

BUT beyond that the good congressman would not budge. Mere mention of the pooling of power or apportioning of territorial rights between a public agency and a private utility seemed to him something like treason.

Now we may assume it to be true for the sake of this argument, as the "public power bloc" statesmen appear to believe, that the private electric industry is conducted by incorrigible reactionaries. Nevertheless it must be still remembered that there is no apparent phyical difference between a wicked kilowatt and an enlightened one. The private industry has just so many production units, so many transmission units, and so many distribution units lying here and there in the Tennessee valley. The TVA and its municipal allies have a similar set-up. Separately both can function well. Jointly both would function better and cheaper.

ONE would think that the recent flood disaster in the Middle West would give some food for thought to those who seem so determined that the public power system of the TVA should be operated in conflict rather than in coöperation with the facilities of the private power industry. Or can it be that the "public power bloc" advocates believe that the present conflict is only a transitional period after which the government, upon clinching its own victory, will establish its own power pool?

THE fact that the private industry claims to be already willing to arbitrate or coöperate apparently is not going to be permitted to interfere with the forthcoming battle and victory. The situation recalls the tale of the determined white trader who suffered great privation trying to find a native tribe reputed to have a treasure of gems. He was chagrined one morning to find the friendly tribal chieftain down on his hands and face before him, offering the gems as a token of friendship.

"GET up," said the trader scornfully kicking the chieftain, "get up and fight like a man. I want to take them away from you."

IN this issue we present as a feature article a discussion of the Federal power situation (beginning page 275) by our frequent contributor, HERBERT COREY, who surely needs no further introduction to FORTNIGHTLY readers. We feel that MR. COREY'S article is of timely interest, notwithstanding the recent termination of operating agreements between the TVA

HERBERT COREY

Power pools eventually—why not now?

(SEE PAGE 275)

and the Commonwealth & Southern group, and notwithstanding the earlier action of President Roosevelt in terminating the TVA power pool conferences. After all, some day there will be a power pool in the Tennessee valley, regardless of who owns or operates what part of it. This is one of those questions that won't be settled until it is settled right.

SPEAKING of power, there will be four articles of interest to electrical utilities in our next issue: (1) a sequel to the article by G. W. Lineweaver described below; (2) a discussion of utility taxes by Frank T. Post, president of The Washington Water Power Company; (3, 4) two electrical engineers, Earl H. Barber and Otto M. Rau, will discuss rate valuation technique and distribution costs, respectively.

ANOTHER article that is sure to be of timely interest, in view of the current discussion about reorganizing the Federal government, is that by G. W. LINEWEAVER on the subject of Federal duplication of regulatory agencies (beginning page 293). When MR. LINEWEAVER in person brought his manuscript and laid it upon our editorial desk, he asked in a half serious tone:

"How many bureaus of the Federal government deal directly or indirectly with electric power, either as regulator, constructor, operator, or special purchaser?"

WELL, it seemed a fair question. We turned it over in our mind slowly. Let us see, there were FPC, TVA, PWA, REA, Army Engineers, Reclamation, and 'er 'er—.We were stuck. How many was that? Six. Well, throw in a few comparatively inactive committees that the President has appointed and call it ten for round numbers. Just then an editorial associate strolled through the office and, after some thought he raised it to a baker's dozen. MR. LINEWEAVER only laughed.

BUT we're not going to give away the answer here. Read MR. LINEWEAVER'S article yourself. It will be well worth your while.

MR. LINEWEAVER, who is a newcomer to the FORTNIGHTLY pages, will nevertheless be recalled by many of our readers as the former secretary of the Federal Power Commission. He is a native Virginian and a veteran newspaperman. At the time this article was being written, he was engaged as a special staff investigator for the Brookings Institution in the preparation of its report on Federal government organizations.

Photo by Underwood & Underwood

G. W. LINEWEAVER

Is Uncle Sam like the old woman who lived in a shoe?

(SEE PAGE 293)

LLOYD BEMIS

He still believes in going value.

(SEE PAGE 284)

LLOYD E. Bemis, whose article on going concern value begins on page 284, is an engineer-accountant, specializing in utility matters. Graduated from Cornell (C.E.), MR. BEMIS, after doing some graduate work at Harvard, became associated with his father, the late Edward W. Bemis, widely known rate case expert. Subsequently, he practiced in Illinois, New York, and Indiana. Until recently he assisted the special telephone investigation staff of the Federal Communications Commission at Washington, D. C.

The next number of this magazine will be out March 18th.

The Editors

In This Issue

In Feature Articles

In Financial News

In State Governor Excerpts

In The March of Events

In The Latest Utility Rulings

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Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

Washington (D. C.) Herald

"If we cannot regulate efficiently, we cannot operate efficiently."

GEORGE W. NORRIS
U. S. Senator from Nebraska.

"I don't believe TVA can afford to go into pools with private companies."

JAMES W. WADSWORTH, JR.
United States Representative from New York.

"Presidents come and go. Congresses come and go. But the bureaucracy goes on forever."

LOUIS PITCHER
General Manager, Dixon (Ill.) Home Telephone Company.

"Let the public utilities be the electric companies, but keep the telephone in a separate classification."

JAMES M. LANDIS
Chairman, Securities and Exchange Commission.

"In this contest between a handful of men and a nation, there can be no question of the final outcome."

MAURY MAVERICK
U. S. Representative from Texas.

"It's time to take the Supreme Court down off the high shelf, to get rid of the halo which surrounds the institution."

ARTHUR E. MORGAN
Chairman, Tennessee Valley Authority.

"It is not wise to so center attention upon utility abuses as to fail to see the great achievements of the electric power industry in America."

HERBERT LEHMAN
Governor of New York.

"The commission should be given the power to act promptly to reduce rates wherever municipalities attempt to burden consumers with rates in excess of the cost of service."

KENNETH MCKELLAR
U. S. Senator from Tennessee.

"After very careful study I have reached the conclusion that whatever may have been the intention of our forefathers, the Supreme Court now has the power to declare statutes unconstitutional."

JESSE H. JONES
Builder and financier.

"The R. F. C., the Home Owners' Loan Corporation, the Farm Credit Administration, the Federal Housing Administration, and Public Works have put more than $15,000,000,000 credit directly into the bloodstream of our economic lives."

ROBERT F. WAGNER
United States Senator from New York.

"We have placed a checkrein on our public utilities, and moved to strengthen governmental regulation of rates. We have saved our railroads from bankruptcy, and have saved millions of home owners and farm owners from mortgage foreclosures."

EXCERPT
From Utah's Legislative Committee Report.

"Of all the other states' public service commissions studied, Wisconsin probably has the best organization. It would be well for Utah to benefit from the experience of Wisconsin as far as it is reasonable."

DECLARATION OF PRINCIPLES
National Association of Manufacturers.

"Where emergency conditions have led to governmental assumption of extraordinary responsibilities, care must be exercised to prevent such emergency agencies from becoming permanent government-owned businesses that compete with private enterprise."

MACKENZIE KING
Premier, Dominion of Canada.

"Our generation is gone a little mad on the question of conferences, it seems to me. A conference is a very convenient way of appearing to be doing something, while in reality very little is being achieved. The more I see of conferences, the less patience I am coming to have with them."

F. G. LANHAM
United States Representative from Texas

"By exchange or by purchase or by whatever method may be necessary, if that is the best way to get a practical dirigible, let us do that; but, at any rate, let us not forsake this field, in which we are favored, and in which experience shows it is practical and feasible to make these transoceanic trips."

ROYAL S. COPELAND
United States Senator from New York.

"It is the savings of individuals which compose the wealth—in other words, the well-being of every nation. On the other hand, it is the wastefulness of individuals which occasions the impoverishment of states. So that every thrifty person may be regarded as a public benefactor and every thriftless person as a public enemy."

HOMER S. CUMMINGS
Attorney General of the United States.

"I confess to a feeling of uneasiness when I reflect on this state of public mind. The public is conscious that that which was unplanned and selfishly guided in the past must take its place in an orderly government process and that a great cleansing and rebuilding program must go forward."

HAMILTON FISH
United States Representative from New York.

"I believe that the Constitution is the greatest charter of human liberty ever conceived by the mind of man. It is what makes for our rights and liberties as free sovereign American citizens. It is the barrier against autocracies and dictatorships of the Old World, whether they be of the left or the right."

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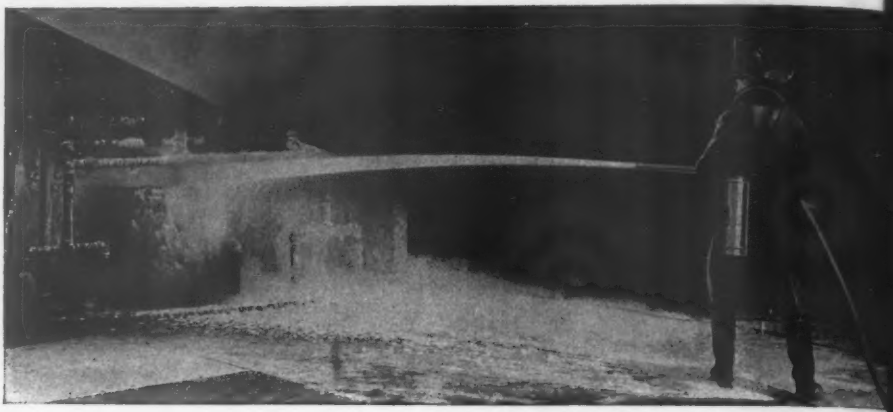

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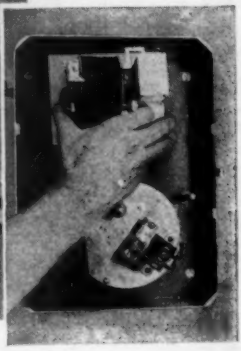
Left: Bristol's Recording Voltmeter, Model 540 M. Movement is interchangeable



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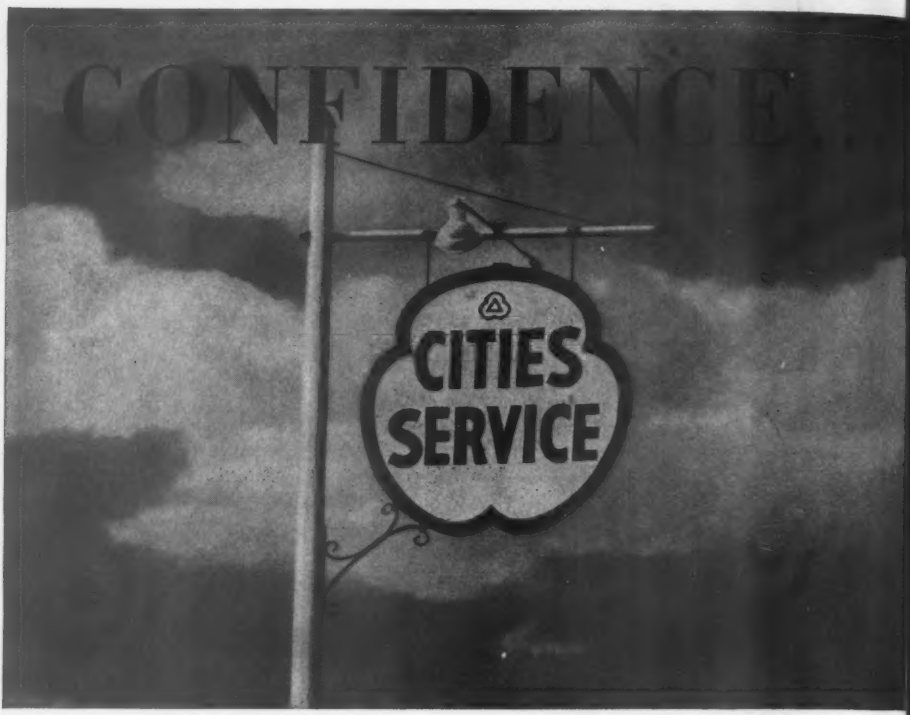

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CITIES SERVICE *Serves A Nation!*

Utilities Almanack

MARCH

4	Th	¶ *New Jersey Gas Association will convene, Asbury Park, N. J., March 23, 1937.*
5	F	¶ *American Society for Testing Materials concludes 1937 regional meeting and committee week, Chicago, Ill., 1937.*
6	Sa	¶ *Oklahoma Telephone Association will hold session, Oklahoma City, Okla., March 23, 24, 1937.*
7	S	¶ *Iowa Independent Telephone Association will convene, Des Moines, Iowa, April 6–8, 1937.*
8	M	¶ *American Gas Association will hold distribution conference, Washington, D. C., April 12–14, 1937.*
9	Tu	¶ *National Fire Protection Association, Electrical Committee, begins session, Atlantic City, N. J., 1937.*
10	W	¶ *Institute of Radio Engineers starts meeting, New York, N. Y., 1937.*
11	Th	¶ *Mid-West Gas Association will hold annual convention, Waterloo, Iowa, April 12–14, 1937.*
12	F	¶ *American Water Works Association, Canadian Section, will convene, Montreal, Canada, April 14–16, 1937.*
13	Sa	¶ *Missouri Association of Public Utilities will hold meeting, Excelsior Springs, Mo., April 21–23, 1937.*
14	S	¶ *The Chamber of Commerce of the United States will hold its 25th annual convention, Washington, D. C., April 26–29, 1937.*
15	M	¶ *Wisconsin Utilities Association, Gas Section, Commercial and Technical Divisions, starts meeting, Milwaukee, Wis., 1937.*
16	Tu	¶ *Texas Telephone Association opens convention, Dallas, Texas, 1937.* ¶ *Railway Engineering Association convenes, Chicago, Ill., 1937.*
17	W	¶ *Edison Electric Institute, Technical Committees, will hold session, Chicago, Ill., May 3–7, 1937.*

Ships at Anchor

Rouge plant, Ford Motor Company

Public Utilities

FORTNIGHTLY

VOL. XIX; NO. 5 MARCH 4, 1937

Federal Power Proposals and Private Dollars

Aims of opposing groups of Federal officials as to the extent of governmental control by hydro-electric development—The Big Dam and Little Dam controversy.

BY HERBERT COREY

ANOTHER sure thing has been added to death and taxes. The administration's power plan, in one form or another, will be offered to Congress for action.

It may be put through.

It is possible that the opposition of the advocates of states' rights—what is left of them — and of the "little rivers" conservationists and of the investors in the utility companies will block it. It is true that the New Deal overwhelmingly controls both houses of Congress. It is also true that congressional leaders fear that this huge majority may split into blocks. Every effort will be made to hold the congressional mass together.

The essence of the plan was stated by Morris L. Cooke, then Administrator of Rural Electrification. That essence is the complete domination of the electric utilities by the Federal government.

Nothing can be simpler than that. Nothing can be simpler, for that matter, than an earthquake. When the first shock is over the power plan and an earthquake have another point of resemblance. They are alike in the complexity of their scrambled details. It is one thing to shake down a structure.

It is another thing to bring some sort of order into the mess that remains.

Boiled to its bones the power plan calls for the division of the United States into a number of power areas, without regard to state lines. The limits of these areas are to be determined by more or less precise reference to the natural sources of power contained within them. Each will be presided over by a Federal administrator. Because state lines will have been wiped out, so far as the production and distribution of electricity is concerned, state regulation must be done away with. Otherwise there would be a constant conflict between state and Federal authorities.

As a matter of course, this assures long-continued and bitter litigation. Only the decision of the Supreme Court of the United States will fix the exact point at which state authority over state matters must cease in the future and Federal authority supervene. If the Supreme Court decides in favor of the states it is reasonably certain that an amendment to the Constitution will be asked for, to give the Federal government that centralized authority which it now lacks. This amendment will be favored by others interested in the movement toward centralization who are not primarily concerned with the utility problem.

The power plan favored by the administration calls for the complete development of all natural sources of power. At the beginning this refers only to the utilization of water power. It is conceivable that in the end the principle will be stretched to cover natural gas, oil, and coal used for power production purposes. This would be an entirely logical development. If the states are deprived of the authority to regulate the production and distribution of hydro electricity it may be assumed they would also be deprived of authority to regulate the production and distribution of oil, gas, and coal. In that event it is to be anticipated that the states will not be permitted to interfere with Federal control through the exercise of their taxing power. If this extension of Federal power is validated by the courts and the voting power of the people, the gate is opened for its further extension in other lines.

THE power plan proposes that through the utilization of water power the cheapest possible electricity may be offered to the consumer. The most extreme advocates of the plan frankly regard electricity as on a par with air, sun, and rain, and would have it made available at the bare cost of manufacture and distribution. If this policy were to be closely approximated the privately owned utilities would be confronted with competition that would be quickly ruinous to them. At this point the power plan advocates divided into two camps.

In one are to be found the out-and-out advocates of government ownership. They would have the government take over the business of making and distributing electricity, lock, stock, and barrel. As our laws do not yet permit the expropriation of privately owned property, as in Russia, the same end would be reached by somewhat softer means. The privately owned properties would be purchased by the government at a price fixed by it. In this group are to be found men who would not even submit the price determination to arbi-

tration or to condemnation proceedings in the court. They would compel the utilities to take a scrap-iron price for their properties under the threat of duplicating their facilities and under-selling them.

In the opposition group are to be found such men as Dr. Arthur E. Morgan, chairman of the Tennessee Valley Authority. He—and they—are unshakable in their contention that electricity should be made available to every one at approximately the cost of production and distribution. However, they are not Asiatic in their contemplation of the means to be used. They would not insist on complete government ownership and operation, but would pursue a flexible course. In areas in which coöperation with privately owned utilities seems advisable they would enter into give-and-take agreements. The privately owned production plants which can be most economically employed would be retained in service, and power from both private sources and government sources would be thrown into a common pool, to be distributed through existing facilities or such other facilities as the government might find it advisable to install. The control of price would be vested in the government, because of its possession of unlimited sources of supply and its indifference to costs when an end is to be attained.

Unlike the first group, however, they promise fair play to the privately owned utilities. By this they mean that when the government takes a plant away from its owners it shall pay a fair price. They agree that these prices should be fixed by the methods which have always been in use, namely, arbitration or condemnation through court procedure, if the parties are unable to reach an understanding by private treaty. If coöperation in production and marketing were agreed to, they would consent, at least in theory, to rates for current which would afford the investors a fair return. It must be borne in mind that the underlying purpose is always to furnish the consumers with current at the lowest possible cost. No one has been precise in stating what "a fair return" for capital may be.

If and when these power areas are set up, each administrator will have full authority to control the production, distribution, and sale of electricity in his area. He must, of course, have authority to prevent the exportation and importation of current for the protection of the domestic consumers and power users. There must be an Administrator Over All, however, to keep the area administrator within bounds. Otherwise the boss of Area A might cut rates to coax business away from Area B. Or the bosses of

¶ "There *is but one way—broadly speaking—to control erosion in the area back of a big dam. That is to persuade the landowners to seed their ground to perennial forage crops that will hold the soil, or else to permit it to grow up to timber. The ideal would be for the government to own the land and take the necessary preservative measures.*"

A and B might get together to change the character of their areas in accordance with their ideas of beauty, decorum, and sweeter home life. Another point of friction within administration circles is discovered here.

It had been assumed that Basil Manly, vice chairman of the Federal Power Commission, would be made the Federal coördinator to boss all Federal coördinators. Mr. Manly is active, able, and, while he is not regarded as a warm friend of the privately owned utilities, he has been considered by them as reasonably fair. But Chairman Frank R. McNinch of the FPC is not pleased with the suggestion that he be passed over if the plum tree is to be shaken. Secretary of the Interior Ickes is understood to have permitted his friends to understand that he is not only the best man for the post but that he violently wants it. Chairman Arthur E. Morgan of the TVA has been suggested, on the ground that he has been disposed to be fair to the privately owned utilities.

LIKEWISE member David E. Lilienthal of the TVA has been urged for the place because he is regarded as hostile to them. U. S. Senator George R. Norris and others of his group are represented as determined that no man not an avowed supporter of government ownership shall become the Administrator Over All. They will have the whip hand, unless the administration has even greater power in the Upper House than is indicated, for before any bill becomes law they can demand that the administrator may only be named by and with the advice and consent of the Senate. This power of veto has always been dear to the Senate.

Meanwhile a cloud is being cast by the "little rivers" men. Unless and until the Supreme Court hands down a clear-cut decision granting the Federal government authority to build big dams for the principal purpose of producing electricity, the New Deal will be forced to take refuge behind the allegation that its big dams are being built for flood and navigation control, and that the production of electricity is merely incidental. This is a reversal of its initial position, which had been assumed before its leaders knew as much of the law and the court decisions as they know now. In the effort to convince those interested that their primary interest was in the control of floods they built up a body of active sentiment for the conservation of the land.

THIS had been talked of, of course, ever since the first hill began to wash, and some little had been done about it. When the TVA moved into the Tennessee valley it deluged the country with most moving views of the injury done to farmlands by the annual washes. There could be no contradiction of the facts as shown. Unless the erosion were stopped, the farm lands would be ruined and ultimately the big dams would be filled with silt, and the whole flood-*cum*-navigation-*cum*-national defense - *cum* - cheap power scheme would be washed out.

There is but one way — broadly speaking — to control erosion in the area back of a big dam. That is to persuade the landowners to seed their ground to perennial forage crops that will hold the soil, or else to permit it to grow up to timber. The ideal would be for the government to own the land

Flood Control and Navigation Aims

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and take the necessary preservative measures. Where this is not practicable the farmers must be persuaded. It may be necessary in certain areas for the government to forbid hillside cultivation in the slopes back of the big dams. This would be an interference with the authority of the state, but could probably be achieved through state coöperation. This coöperation could be secured in all cases in which the state is profiting by the Federal enterprise. In the Tennessee valley, however, complaints have been heard that the government has acquired so much land either for reservoir purposes or protection against silt that state and county revenues have been impaired.

MEANWHILE a school of practical farmers and conservationists has become vocal in opposition to big dams —the only dams that are useful for power production purposes—and insistent that the control of the "little waters" is the only way in which erosion can be checked without injury to the countryside. This involves the damming of gullies and washes right to the top of the hills. No flood-like offpouring is permitted because the storm waters are caught and held in a multitude of little basins. It is in effect a return to nature's way of lessening the flood tide through the absorption of waters in fields that have not been skinned of their protective herbage and in forests bedded deep in mould. The booklet "Little Waters," written by H. S. Person, consulting economist, and presented by the collaborating Soil Conservation Service, the Resettlement Administration, and the Rural Electrification Administration, created little short of a furore when it appeared.

If the control of headwaters, as advocated in this booklet, were accepted as an administrative policy, the power plan would receive a severe blow, for without big dams it would be shorn of much of its importance. These big dams, present or prospective, are in the areas of the Tennessee valley, the Columbia river basin, the St. Lawrence river valley, Passamaquoddy, and the proposed Mississippi River Authority, which would control the Mississippi watershed from source to mouth of the big river. There are an infinite number of other big dams, present or prospective, which would form the nucleus for power pool areas, if the plan is accepted

by Congress, each with its Authority. Even without the big dams, however, the Federal control of electric utilities could be secured by law, if any instrument which thus invades states' rights could be validated by the Supreme Court.

MEANWHILE it is obvious that no matter what form it takes, with or without big dams, with full ownership by the government or partial ownership plus coöperation, or Federal regulation as opposed to the regulation by the states, an injury will be done to one of the greatest of American industries. The moral aspects of the problem will not be touched on here, nor will further reference be made to the fact that the policy of government ownership is being furthered by the government without reference to the people. (It might be urged, of course, that the jug-handled vote given Mr. Roosevelt in 1936 amounted to a mandate.) These facts will be accepted without dissent, however, by both sides:

First, the utility industry has an investment of somewhere between twelve billions and fifteen billions of dollars;

Second, it has been earning a good return. Its paper has been a preferred investment for the most conservative holders.

Third, it has been paying in various taxes to the Federal, state, and local governments from twelve to fifteen per cent of its gross income.

Fourth, by whatever proportion the privately owned utilities are taken over by the government this tax payment will be reduced. The government does not pay taxes to itself. Likewise the government—which is to say the Federal taxpayer—must stand the loss, if the government loses money in operation. At present such losses are absorbed by the stockholders.

Fifth, it may be assumed that if the industry passes into the hands of the Federal government, in whole or in part, no fewer employees will be engaged than are now in the service. If the usual rule of governments in business is followed, that number will be largely increased.

IT does not follow that the men and women now employed will be retained under the government. It is not to be hoped that the political head of an administration—any administration—would overlook the value of so great a body of votes. Dr. Arthur E. Morgan, of the TVA, called attention to this:

"If we greatly extend public ownership, then the doctrine that 'to the victor belongs the spoils' will spell the doom of social and economic decency and health."

Morris L. Cooke agreed with Dr. Morgan. When asked if he thought it would be a good thing for the Federal government to take over the electric business in the United States, he replied:

"I think it would be a calamity."

If the power pool plan were adopted, however, it would not be necessary for the advocates of public ownership to go to the full doctrinary limit to get complete control of the industry. Dr. Morgan has observed that "electric power distribution by public ownership must be seen as a regional rather than a municipal matter."

SIMILARLY control by the government must be seen as a regional

rather than as a municipal matter. It is, in fact, the only practicable way in which that control could be secured. If the Federal government proposed to buy outright the utilities of the five states of the Tennessee valley it is at least reasonable to conclude that the taxpayers — at least those taxpayers who are not completely mute—would have protested against a huge and needless addition to the public debt. It would be extremely difficult for the administration to secure the passage by Congress of a bill giving to the Federal government the sole authority to regulate utilities, without regard to state lines.

But when the same proposition is presented in the guise of making use of the magnificent and neglected natural resources it, somehow, begins to look like a bargain.

Before Congress does anything at all, if it has regained control of those deliberative faculties which it once possessed, it will presumably undertake an examination of the present status in the Tennessee valley, where some if not all of the obstacles to complete control are being met by the TVA that would be encountered if the power plan were to be made law. The reluctance with which the stockholders of the Commonwealth and Southern have displayed to surrendering any portion of their property to Authority Director Lilienthal's somewhat obdurate mercies is known and that ancient history will not be recounted again.

BUT the TVA and the Commonwealth and Southern have made a real effort to work out some fair compromise between what Lilienthal wants and the Commonwealth and Southern must have and up to this time without success. A similar conflict must take place in every one of the power areas, if they are established by law, between the agencies of the Federal government and the privately owned utilities. The Commonwealth and Southern has urged that competition between a federally owned system and a large privately owned system would be detrimental to the interests of both. It has recognized that no corporation, no matter how great, may hope to resist the power of the Federal government if there is a disposition to apply that power ruthlessly. It therefore has asked that:

Either the government buy all its systems in the Southeast, or;

Permit the Commonwealth and Southern to operate free of the unfair competition of the government organization.

Failing the acceptance of either suggestion, the Commonwealth and Southern would propose an intercon-

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¶ "IF *Dr. Morgan's plan were to be adopted by the Federal government in its dealings with the privately owned utilities, the whole complexion of the power plan, as it is understood at present, would be changed. He has said nothing of a projected invasion of states' rights, although under his proposition states might enter into a treaty with each other or the Federal government for the accomplishment of certain ends.*"

nection of the generation and transmission facilities of both the TVA and the Commonwealth and Southern, leaving the distribution exclusively to the power companies and the existing municipal plants.

Or that the government acquire, either by condemnation or negotiation, the generation, transmission, and distribution lines in an area selected as a "yardstick," under pledge that the government's operations be confined strictly to the selected area for an agreed number of years, and that the cost accounting shall be determined under a uniform system as determined by the Federal Power Commission.

It is understood that Chairman A. E. Morgan agrees in the whole with this statement of interest, and that his feud with Authority Director David Lilienthal has its springs in that fact. Lilienthal would acquire selected items of the Commonwealth and Southern system at his own price, under threat of duplication and consequent ruin, and thereby make sure of a profit-showing operation. This would be especially assured if he is permitted to make his own cost-accounting and capital-investment showing. If Morgan resigns, it may be taken for granted that the administration is committed to the Lilienthal method. Morgan has maintained that the utility industry is affected by a public interest, and is not to be permitted to operate with a sole view to the making of a private profit.

However, he would allow a profit to the degree necessary to secure sufficient capital, competent management, and progressive development. He would require a privately owned utility to make such additions as needful to serve its territory, but he would not force such a utility to surrender its property without fair compensation. He believes that public bodies operating utilities should be required to account for property and services at their full and fair value and to pay fair compensation to the men engaged in them. He opposes arbitrary action by the government and suggests that public officials or agencies who or which have been aggressive in favor of a policy should not be the sole determiners of such matters as values, representation, or delimitation of areas where private utilities are involved.

In all cases he thinks standard arbitration methods should be used. He is committed to the policy of informing the private utilities frankly of the TVA's plans, in order that there might be removed what they claim to be a very real but undefined threat of uncompensated dismemberment and duplication of facilities, which they claim puts them at an arbitrary disadvantage in relation to public power agencies. He deprecates ruthless strategy by either side and would remove the fear the Commonwealth and Southern now feels that low-priced or allegedly subsidized TVA power might destroy private investments in pool areas. Finally, he would have the negotiations between the opposing parties proceed a stage at a time, by the trial and error system, perhaps under a contractual agreement which could be altered as required.

If Dr. Morgan's plan were to be adopted by the Federal government in its dealings with the privately owned utilities, the whole complexion of the power plan, as it is understood at present, would be changed. He has said nothing of a projected invasion

of states' rights, although under his proposition states might enter into a treaty with each other or the Federal government for the accomplishment of certain ends.

It might even be doubted whether Dr. Morgan is an advocate of fully centralized government.

In any event coördinated power operation in the TVA area is eventually inevitable no matter who finally operates what part of it.

Queer Goings On in the Telephone Field

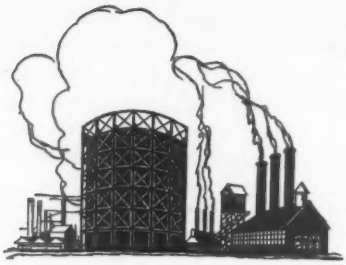
WHEN "hot air" passes through the telephone wire, that's not news, but when a telephone wire passes through hot air, that, as the sports writers would say, is a hot one. Believe it or not, the Bell Telephone System is fixing to make you folks talk through a gas pipe in the very near future. It's all on account of this coaxial cable that the Bell Laboratories have been monkeying with during the last few years. This cable is really a pipe filled with certain gases and a tube core hermetically sealed, except for the terminal connections, from the outside world. It can transmit 240 telephone conversations at once. It had its debut in Manhattan last December for the edification of the newspaper men. Now the trick is to find somebody who can carry on 240 telephone conversations at once. Most of the newspaper men suggested their city editors.

* * * *

Don't blame the telephone company if you pick up your party line receiver and hear a noise suggesting the combination of a brutal murder, a cat fight, and the S. S. Queen Mary on a foggy night. It may be only little Willie, the neighbor's boy, taking his bagpipe lesson. Such was the disheartening tidings contained in a news item in a recent telephone journal. It seems that Pipe-Major J. Maclean of Rockcliff, Kilcreggan, Scotland, a noted bagpipe virtuoso, has started to tutor pupils by long-distance telephone. Do you intend to put up with such a thing in this country, Mr. Federal Communications Commissioner? Have the subscribers no rights?

* * * *

The telephone has broken into diplomatic circles. Yes, indeed. The peace plan proposed by Secretary of State Hull at the recent Inter-American Conference at Buenos Aires sets up a consultative committee to consist of representatives of the twenty-one signatory republics. In case of war or any threat of war, members can get in touch with one another at any time "by telephone, telegraph, or mail." The idea of the telephone treaty clause is to avoid delays heretofore characteristic of formal diplomatic communication, such as that which allowed the Battle of New Orleans to be fought days after the War of 1812 had been ended by the Treaty of Ghent. It's a good trick if it works, but one wonders whether direct communication between some of our contemporary officials would always lead to peace. Can you imagine a quiet little chat between Hitler and Stalin? With the best intentions in the world, Secretary Hull may be setting up only another medium through which our statesmen can insult one another—"quickly, clearly, and inexpensively"—to quote the long-distance phone ad.



Going Value Is Still with Us and Why Not?

But it is not an element, in the opinion of the author, to be automatically recognized; nor should it be automatically repudiated.

By LLOYD BEMIS

So much has been written and said about going concern value during the last few years that there is a definite burden of proof, so to speak, resting upon any one who attempts to plow anew this much harrowed ground, to show that he might have something else to offer besides the hackneyed arguments that have been bandied back and forth between those who still believe in and those who refute going value. With all due humility, this writer approaches this task with a bouquet of Supreme Court decisions. By nothing more spectacular than old-fashioned interpretation of the court's own words, he feels there is still something to be said of going value, other than that it is dead, dying, or sadly misunderstood.

In short, this writer feels that for those who take the trouble to read the Supreme Court decisions in various cases to be cited later, there should be little difficulty in understanding, not only the general concept of what going value is, but what is far more important, *when* it is.

First of all, much unnecessary confusion can be brushed away if we will only recognize that going value is not one of those immutable verities of the valuation process—something to be recognized and accounted for in each and every appraisal, regardless of how other elements of value have been recognized and accounted for. In other words, we must recognize the practical rule that going value exists as a separate unit for appraisal only when it has not otherwise been recognized and accounted for.

To give a concrete example, let us pass over the classical definition of going value as the "difference in value between the bare bones plant assembled and ready to operate and the same plant operating as a going concern with busi-

ness attached." Let us proceed straightway to the hypothetical case of, let us say, a toll bridge. Now it is obviously possible to count up the cost of every nut and bolt and girder of the bridge. To this we can add different labor costs, insurance, and other overheads. When we finish this we have the cost of building the bridge—the capital investment, every nickel the owner put out on the job. Next we compute the cost of attaching business—advertising, training personnel, and so forth. These are operating expenses—every nickel the owner put out in bringing his business into normal successful operation.

Now when we have done all that, why should there be any allowance for going value? What value is there over and above that, which has been included either as capital cost or operating expense? To permit a separate allowance for going value under color of "cost of attaching business," or "overheads," would result in unjust enrichment of the utility company. It would be simply letting the company have its cake and eat it too. However, where a part of such capital costs or operating expenses have clearly not been recognized in either the appraisal or the operating expenses as such, an allowance for going value is not only fair but necessary under such circumstances, to avoid confiscation. This might easily happen in the event that a state commission insisted on a literal, restricted valuation of a plant, section by section, without fully and clearly allowing for the overhead costs or intangible expense item previously mentioned.

Thus we see that "going value" as a separate allowance in valuation is not an element to be automatically recognized nor automatically repudiated. It all depends upon the manner in which the valuation appraisal has been made. That is just about what the Supreme Court has said in the three principal modern decisions on this subject.[1]

Under these decisions neither confiscation nor unjust enrichment is permitted in public utility cases. Capital accounts may include proper overheads. But when overheads have been properly capitalized, they may not also be added to operating expenses, and thus become the basis for a double burden on consumers and a means of confusing investors who are looking for actual valuation data. Likewise, items which have been charged to operating expenses are not to be added to capital account. Disputed items which have been allocated either to operating expenses or to capital accounts are not to be further augmented by including such items in claims for going value.

The confusion as to what the court has meant in these and other cases probably results from the liberality of the court in refusing to interfere in the details of the local regulatory process. There are certain disputed items in many utility appraisals which may be easily charged to either operating expenses or capital accounts. The court has simply said to the utility, in effect, "you can do it either way you want to, but you can't do it both ways at once."

[1] Los Angeles Gas & E. Corp. *v.* California R. Commission, 289 U. S. 287-334, P.U.R. 1933C, 229; Dayton Power & Light Co. *v.* Ohio Pub. Utilities Commission (1934) 292 U. S. 290-312, 3 P.U.R. (N.S.) 279; Columbus Gas & Fuel Co. *v.* Ohio Pub. Utilities Commission (1934) 292 U. S. 398-415, 4 P.U.R. (N.S.) 152.

And where a state regulatory body has preferred one method to the other, the court has given the regulatory agency the benefit of the doubt in the absence of affirmative or convincing evidence to the contrary.

"We do not sit as a board of revision, but to enforce constitutional rights," said the court in the Los Angeles Case.

IT is somewhat ironic that this very commendable forbearance on the part of the court—this obvious intent to give the state agencies the fullest possible latitude of regulatory action—should be the basis for criticism to the effect that the court is inconsistent or cannot make up its mind on whether going value should be considered or not considered.

Thus, only recently, a critic of the "fair value" principle in Supreme Court decisions reviewed all the Supreme Court cases on going value cited by Chief Justice Hughes in the Los Angles Case (there were ten of them)[2] and said with attempted sarcasm "the Chief Justice finds no conflict in any of these decisions." The answer of this writer to that observation is, "Of course!" Naturally, the approach of the court in these cases differed as the respective factual situations and legal issues differed; but surely the conscientious reader of the text of the decisions will find the court's broad underlying concept of "fair return on a fair value" running like a bright red thread through the whole series. Even in those cases where vigorous dissenting opinion was registered, it is easy to perceive the same principle beneath both majority and dissenting reasoning. The difference between them is invariably a difference as to evidence—and upon evidence judges will always differ in close cases, as long as there are judges and evidence.

THROUGHOUT these decisions runs the thought that determination of the value of utility property "is not a matter of formula" but there must be a "reasonable judgment having its basis in a proper consideration of all relevant facts." The property may not be appraised as "junk" or "bare bones," but must be valued as an "in-

[2] Willcox *v.* Consolidated Gas Co. (1909) 212 U. S. 19, 52, 53, L.ed. 382; Cedar Rapids Gas Light Co. *v.* Cedar Rapids (1912) 223 U. S. 655, 669, 56 L.ed. 594; Des Moines Gas Co. *v.* Des Moines, 238 U. S. 153, 165, P.U.R. 1915D, 577; Denver *v.* Denver Union Water Co. 246 U. S. 178, 191, P.U.R. 1918C, 640; Lincoln Gas & E. L. Co. *v.* Lincoln (1919) 250 U. S. 256, 267, 268, 63 L.ed. 968; Galveston Electric Co. *v.* Galveston, 258 U. S. 388, 394, P.U.R. 1922D, 159; Georgia R. & Power Co. *v.* Georgia R. Commission, 262 U. S. 625, 630, P.U.R. 1923D, 1; Bluefield Water Works & Improv. Co. *v.* West Virginia Pub. Service Commission, 262 U. S. 679, 690, P.U.R. 1923D, 11; Public Utility Comrs. *v.* New York Teleph. Co. 271 U. S. 23, 31, P.U.R. 1926C, 740; McCardle *v.* Indianapolis Water Co. (1926) 272 U. S. 400, 414, P.U.R. 1927A, 15.

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tegrated operating enterprise." The valuation may not stand unchallenged if it results in "confiscation" on the one hand or "unjust enrichment" on the other.

But let us get right down to the harmonization of some of these cases, and the innate fairness and consistency of the court's position will speak for itself. First of all, in point of time, was the Cedar Rapids Gas Case in 1912. There the court noted that, in the decision under review, "the fact that the plant was in successful operation had been taken into account and that a value had been fixed which considerably exceeded its cost." Naturally the court felt no need to interfere with the result.

Then in 1915 came the Des Moines Gas Case, wherein the lower court had excluded a special item for going value in dealing with a master's report. "Applying the rule of the Cedar Rapids Case," the Supreme Court held that the master had "already valued the property in the estimate of what he called its physical value, upon the basis of a plant in actual and successful operation." As the master had in this case included overheads at 15 per cent in addition to organization expenses, the court was unable to hold that "the element of going value" had not been given the consideration it deserved.

HOWEVER, in the Denver Water Case (1918) the court observed that a master had "expressly declared that his detailed valuation of the physical property and water rights included no increment because the property constituted an assembled and established plant doing business and earning money." When the court, upon examination, found that this was true, it made certain conclusions as to value and fair return which led to its holding a rate ordinance to be confiscatory.

In the Lincoln Gas Case, which came along in 1919, the court questioned the propriety of a master's treatment of going value but, upon noting compensatory errors in favor of the complainant, it could not conclude that the master was wrong in failing to find a rate ordinance confiscatory.

The Galveston Electric Case in 1922 was noteworthy in that the court held therein that a utility cannot erect out of past deficits during the period of business development, a basis (going value) for holding confiscatory for the future rates which would, on the basis of present fair value, be compensatory. This was an important qualification on the concept of going value and laid the groundwork for the present-day principle that where development costs have been charged to operating expenses they cannot again be capitalized as part of the rate base under the disguise of "going value." It was also in this case that the court restated the distinction between going value and good will.

IN the Georgia Power Case (1923) the lower court's findings as to going value were not disturbed. In the Bluefield Waterworks Case (1923) the lower court's findings as to going value (10 per cent) were disturbed. In the Indianapolis Waterworks Case (1926) the court found that the commission engineer had failed to make any allowance for going concern value for which there was ample and convincing evidence of existence. Summarizing the foregoing cases in the

Going Value a Fact

"GOING value, when all is said and done, is a fact. It may and generally does take skilful judgment to decide the extent to which it exists. It may, as we have seen, be accounted for in different ways; but it is nevertheless a fact which can neither be substituted by formula nor dismissed by verbal ritual. A regulatory body must look over each case as it comes up and decide—in its own peculiar way, if it wants to; but it must decide—with reasonable intelligence and fairness."

Los Angeles Case, Chief Justice Hughes said:

> The concept of going value is not to be used to escape the just exercise of the regulatory power in fixing rates, and, on the other hand, that authority is not entitled to treat a living organism as nothing more than bare bones.
>
> The principle as thus recognized and limited is obviously difficult of application. Cedar Rapids Gas Light Co. *v.* Cedar Rapids (1912) 223 U. S. 655, 669, 56 L.ed. 594. It does not give license to mere speculation; it calls for consideration of the history and circumstances of the particular enterprise, and attempts at precise definition have been avoided.

Take a practical view of the matter and ask yourself: What other rule could there be? Let us see. Suppose for purposes of argument that we outlawed going value as a separate allowance — unconditionally. Would that not allow state commissions to render mere lip service to the valuation of the intangible elements by a disarming recital to the effect "we have valued this property as an established and going concern." If in fact they had not done so, the burden of proof and procedural difficulties facing the company on appeal might easily be too heavy to bear with fairness.

CONVERSELY, if going concern value were required as an automatic appendix to the valuation process, we would witness such absurdities as those which have actually happened in cases where commissions made perfunctory allowances for going value as a certain percentage of the rate base, without knowing why or what it was supposed to represent. Under such circumstances, human nature being what it is, it might be difficult for utilities to resist the temptation to try eating their cake and having it too, by the simple expedient of slipping the intangible values into the appraisal in addition to the going concern allowance.

Going value, when all is said and

done, is a fact. It may and generally does take skilful judgment to decide the extent to which it exists. It may, as we have seen, be accounted for in different ways; but it is nevertheless a fact which can neither be substituted by formula nor dismissed by verbal ritual. A regulatory body must look over each case as it comes up and decide—in its own peculiar way, if it wants to; but it must decide—with reasonable intelligence and fairness.

THERE is then no more reason for automatically computing going value at 10 per cent of the rate base for each and every utility than there is in assuming that each and every individual citizen has the same proportionate qualities of honesty, perseverance, or other virtues. If an additional and separate allowance is to be made for going value the judicial body should look for, in the first instance, and the utility must be prepared to show in the first instance and on appeal as well, solid and convincing evidence of the existence and amount of the claimed going value.

This leads directly to the reason why most of the unsuccessful claims of going value have been thrown out by the courts; it is that which Chief Justice Hughes (in the Los Angeles Case) calls "uncertain and conjectural estimates." He rejects, decisively, estimates of going value offered by different witnesses "as evidence of a highly speculative and uncertain character." Under this category he rejects in decisive succession claims for going value based on: the "percentage method," the "consumer method," the "gross revenue method" or "capitalization of profits," the estimated "cost of securing the business during the construction period," the "cost of securing the present business of the company," the estimated "cost of organizing property and personnel," and other claims for the capitalization of uncertain intangible elements.

AMONG miscellaneous methods and measures, urged by the company as a basis for going value, one witness claimed that the court should give consideration to the fact that the company had "an exceptionally good history of growth, an established business, with satisfactory record of earnings and excellent future prospects."

In estimating going value by the "gross revenue" or "capitalization of profits" method, one of the witnesses for the company claimed that in his experience a purchaser would ordinarily and reasonably pay for a property with established earnings, and on a stabilized operating basis, approximately one-year's revenue over and above the value of the physical property. The estimate for going value under the "consumer method" was based on a claim that the cost was not less than $25 per meter for the gas company. Another estimate based on the "percentage method" was given by a witness for the company who claimed that a purchaser would pay approximately 15 per cent above the cost of reproduction because of the going value of a developed property.

All of these estimates and claims were swept aside by the court with the statement:

> It is unnecessary to analyze the testimony of these witnesses, as it is obviously too conjectural to justify us in treating the failure to include their estimates as a sufficient basis for a finding of confiscation.

MANY commentators on the Los Angles Case have been troubled and confused because while the court rejected the claim of the company that the failure of the state commission to make a specific and separate allowance for going value in the rate base justified an attack on the ground of confiscation, nevertheless the court stated in effect: Where the estimate of the regulatory body purports to give the fair value of the plant as a going property with business attached, and exceeds substantially the value assigned to the physical property, omitting parts no longer needed in the business but including allowances for interest, organization expenses, franchises, land values, overheads, etc., the excess may be assigned to "going value" although not so described in terms by the commission making the valuation. Now all confusion will be dispersed if "counsel" will remember that the court was considering the property in question as an "integrated, operating enterprise," and that the court decided that the commission had appraised the property as an "integrated, operating enterprise."

The court could consistently reject the demand for a specific and separate allowance for going value where the evidence offered was "highly uncertain and speculative," and where the commission had not valued the property as "bare bones" but had appraised it as "an integrated and established enterprise."

TWO sharp examples of the vigilance of the Supreme Court in blocking speculative and conjectural evidence as a basis for claimed going value is to be found in the two Ohio gas cases (Columbus and Dayton). In the former, Justice Cardozo stated:

> The going value of the Ohio Fuel Gas Company was placed by the appellant's witness at a figure so high ($12,000,000) as to be excessive almost on its face, and the impression of exaggeration is confirmed when the appraisal as a whole is resolved into its elements.
>
> Thus some of the appellant's experts have included interest or return unearned during the business development period as a factor contributing to going value, one witness placing this factor as high as $6,300,000. Their method of computation was condemned by this court in Galveston Electric Co. *v.* Galveston, 258 U. S. 388, 394, P.U.R. 1922D, 159, in very similar conditions. . . .
>
> Other experts, who reject the factor of interest unearned during the period of development, build their estimates of going value upon the cost of attaching new customers to the business, a cost not taken from the books but merely presumed or estimated at widely variant amounts. So far as such expenses had been actually incurred by any affiliated company, they had already been included as part of the cost of operation. So far as value had been added above the moneys thus expended there was not even approximate precision in measuring its amount. The burden of building up patronage may be negligible where there is little competition with any other producer or with other kinds of fuel. . . .

¶ *". . . determination of the value of utility property 'is not a matter of formula' but there must be a 'reasonable judgment having its basis in a proper consideration of all relevant facts.' The property may not be appraised as 'junk' or 'bare bones,' but must be valued as an 'integrated operating enterprise.' The valuation may not stand unchallenged if it results in 'confiscation' on the one hand or 'unjust enrichment' on the other."*

Other experts testifying to an aggregate, without assigning a proportion to the contributory factors, give estimates so vague as to be little more than guesses, one of them, for illustration, holding to the opinion that ten would be a fair percentage, yet unable to give a reason why the amount should not be less or greater. . . .

From the testimony as a whole one gains a definite impression that the opinions are derived for the most part from a professed experience and understanding of business conditions generally, and very little from any knowledge of the "history and circumstances of the particular enterprise." . . .

We cannot find that the commission and the court went beyond the bounds of a legitimate discretion in putting aside these estimates as too uncertain to be followed.

Certainly stronger language disallowing going value as a separate element in the base could hardly be employed, but it was just about equaled by Justice Cardozo himself in the Dayton Case, when he made the following statement:

Dissection of the several items that have been criticized in the appellant's argument has thus brought us to the conclusion that the order of the commission, whether generous or ungenerous, is at all events not confiscatory, and hence not subject to revision here. But the conclusion has reinforcements that come to it from other avenues of approach. In a statement put in evidence by the appellant, the rate of return under the new schedule is said to be 1-28/100 per cent of the fair value of the property. Under the earlier schedule the revenue was even less. So modest a rate suggests an inflation of the base on which the rate has been computed. It is a strain on credulity to argue that the appellant, when putting into effect a new schedule of charges, was satisfied with one productive of so meager a return. The same surprise is excited when we consider what it claims as to the fair value of the gas delivered at the gates. All that the affiliated seller asks is 45 cents per thousand cubic feet, yet according to the appellant's figures nearly 7 cents more, or a price of about 52 cents, is necessary to protect the seller against the wrong of confiscation. The argument proves too much: the valuations are discredited by the teachings of experience. Men do not transact business without protest at confiscatory rates, at all event in the absence of extraordinary circumstances making submission to the loss expedient. If such circumstances exist, the appellant has not proved them. Nothing in the record lays the basis for a belief that the natural gas business in Ohio is unable to pay its way. That being so, what the public utility has done belies what it has said. We shall hardly go astray if we prefer the test of conduct.

MANY former decisions rendered by state commissions and state courts, as well as by lower Federal courts, have been rendered obsolete by the definite enunciation of principles of valuation in these recent Supreme Court decisions. Some of the commissions and some of the lower courts still seem to be oblivious of the principles so clearly restated by the Supreme Court, but on the whole, recent commission orders and court decisions have followed the principles set forth in the Los Angeles, the Dayton, and Columbus Cases, and have shown renewed understanding in solving the problems under their jurisdiction.

The questions confronting commissions and lower courts in determining the validity of various factors claimed as elements in going value are not always easy to answer even though the Supreme Court of the United States has charted the path for finding correct principles. Over and over again the practical question arises when considering development costs and other costs claimed as going value: have the amounts claimed already been included in operating expenses, or already been charged to capital account?

The difficulties in computing going value allowances have been lessened with the development of uniform systems of accounts, wherein the actual disposition of items in dispute may be established by the history and records of the plants under consideration.

IT may be that in the future the Federal and state concept and applica-

tion of such accounting systems will be sufficiently uniform to reduce the question of going concern value to a less difficult problem. However, as we have seen, accounting formulas alone can only simplify or clarify the problem, they can never eliminate it. This is so because going value is not entirely synonymous with cost. A bankrupt profitless railway, about to be abandoned, may theoretically cost the same in every respect as a successful one in a neighboring city, yet we know the latter has some going value above its physical construction cost, while the latter is worth only its price as junk.

And so it may be all very well to say that going value is going out of style, or as one speaker at the 1934 convention of the National Association of Railroad and Utilities Commissioners said, "going value is already on the rock pile."

As far as making separate allowances under the formal title "going value," that may possibly be true in certain states. But remember, the Supreme Court deals with equities not nomenclature. Going value under its own or any other name will always be with us and the Supreme Court will see to it that, whatever you may choose to call it, it is given proper recognition in proper cases.

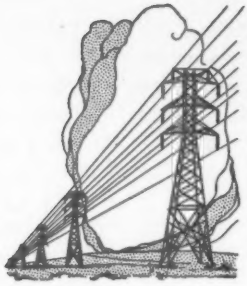
British Railroads Reply to the Motor Trailer

"BRITISH *business does tend to its regular customers—that is, to the British public itself. British business doesn't overlook many chances, however small they may be, to earn an honest shilling from the home population.*

"One of the projects of a big railroad company is its camp-coaching department. The road had several hundred obsolete passenger coaches on its hands; these were fitted up as living quarters, each with sleeping accommodations for six persons, a dining room, a kitchen, linen, and tableware. The railway then put out an advertising campaign aimed at families of moderate means who wanted to go somewhere for their summer holidays, but who aren't able to pay summer hotel prices or afford the luxury of an automobile trailer.

"To rent a coach you write to the railway headquarters in London. The railway sends you a list of places on its lines where your coach may be parked, on a siding at some remote country station, or near the seashore. The local station agent is your landlord. He will buy your food supplies for you, attend to your mail, and if you want to shoot or fish he will get you a license. The rent of the coach is three pounds a week—approximately fifteen dollars in American money."

—JESSE RAINSFORD SPRAGUE,
The Saturday Evening Post.



Uncle Sam's Regulatory Topsy and the Power Industry

It just "growed" but here it is

The sprawl of the casual Federal agency or bureau interest in power, says the author, ranges from solicitation of information as to rates in a remote town in Wyoming to whether a given utility is making so much money that Uncle Sam should take away the excessive profits. Some of the information sought would keep a staff of accountants and stenographers busy for a week. The sky is the limit.

By G. W. LINEWEAVER
FORMER SECRETARY, FEDERAL POWER COMMISSION

It is well known that too many cooks can spoil the broth. That is, perhaps, the least mischief they can get into. Too many cooks also eat a great deal; the overhead of their upkeep (separate equipment, etc.) is expensive. They are constantly getting in one another's way and in the way of the other servants; all of which does not make for domestic tranquillity or efficiency.

It would, perhaps, be unfair to say that Uncle Sam's official servants in charge of regulating or dealing with various phases of the power industry resemble the case of too many cooks, because, as a matter of fact, they are not all cooks in the sense of performing exactly the same duties. Some are like cooks, others like waiters, and others aid in the general task of carrying on relations between the government and the power industry. Nevertheless, there is a certain element of duplication, and they do seem to get in one another's way. And so it would probably be fairer to shift the analogy from the proverbial excess of cooks to that of the little black moppet in Uncle Tom's Cabin who "just growed" —Topsy.

Even during the B. R. era (that is, Before Roosevelt) numerous unrelated Federal agencies had taken on tasks of one kind or another which required more or less coöperation on the part of the power industry. These various organizations, or at least their power activities, "just growed." Since the advent of President Roosevelt the

number of such agencies has shown a marked increase, with little discernible relationship or planned coördination. Let us look at this modern governmental Topsy.

More than a score of executive departments, through bureaus that operate more or less independently, commissions, boards, government corporations, and single administrators have functions of a major character directly concerned with power expressly authorized by statute. Twice as many bureaus and agencies have or take to themselves functions more or less indirectly connected with the subject of electric power.

The Federal agency interest in power is sprawled all over the lot of the vast governmental set-up in Washington, with no centralization of control or supervision over the myriad activities, many incidental or insignificant in themselves, but in the aggregate representing time, effort, and expense for which the Treasury pays, and constituting no small burden on the utility industry, public and private.

The Federal Power Act (Title II, Public Utility Act of 1935) indicated a desire on the part of Congress to make the Federal Power Commission a clearing house for the collection and compilation of statistics and information from the electric industry, its analysis, and its dissemination to other governmental agencies and the public. The objective was to relieve the industry and other Federal agencies of increasing demands for information through official channels or from the public; also to eliminate conflicting interpretations of statistics and other information.

The result has not been crowned with success. Only one statistical activity has been merged with the commission from another agency in the first fifteen months of the Federal Power Act's existence. Private and public utility operators are still bombarded with questionnaires by this and that Federal bureau about rates and other information that is available in interpretable form in the Federal Power Commission, or should be.

A similar and more far-reaching effort was attempted in the Federal Water Power Act of 1920, now incorporated in the Federal Power Act. A central agency was to control, regulate, and encourage the development of water-power resources by private capital, states, and municipalities. The Federal Power Commission then created (composed of Cabinet members within whose departments some control of water power was vested) was to be the clearing house for all power activity in which the Federal government was interested. But the functions of the four or five bureaus in the several departments were not disturbed and there is now, after sixteen years, dual administrative control over power facilities on navigable streams, national forests, and public lands, many under FPC licenses and others under permits or other authorizations, administered by bureaus of other departments, under jurisdiction antedating June 10, 1920.

In one instance in the West a utility has had the base of a dam under a Forest Service permit for many years. When it desired to raise the height of the structure, in recent years, it was necessary to secure a license from FPC.

Both agencies still have administrative control so far as Washington is concerned. Field supervision through coöperation is exercised by the Forest Service in its own sphere and as the accredited agent of FPC. Nevertheless, in theory at least, we have the bottom of the dam supervised by one agency and the top of it by another.

The sprawl of the casual Federal agency or bureau interest in power ranges from the solicitation of information as to rates in a remote town in Wyoming to whether a given utility is making so much money that Uncle Sam should take away the excessive profits. Some of the information sought would keep a staff of accountants and stenographers busy for a week. The sky is the limit.

In the major field of regulation by Federal agencies, authorized by law or expressly directed by statute, the field is no less broad. Its range is from the regulation of the relatively small volume of energy subject to Federal jurisdiction or the licensing of a mile of transmission line on public lands, to the supervision and control of the construction and operation of huge hydroelectric plants, the cost of which may run as high as $50,000,000 or more. There are nearly 1,000 Federal licenses, permits, easements, or other authorizations outstanding, affecting 400 to 500 different utility companies in practically every state. Most of the authorizations are issued by FPC with field work handled by the Corps of Engineers (War Department) on navigable streams; Forest Service (Agriculture) on forest lands; and Geological Survey (Interior) on public lands. Each of these last three agencies administers in its own right power permits issued prior to June 10, 1920.

OTHER agencies figure in the permit or licensing phase of Federal activity, including the General Land Office in connection with power developments on public lands, the Bureau of Reclamation, the soil and engineering services of the Department of Agriculture, the Biological Survey as to effect of power dams on wild life; and the Bureau of Fisheries (Commerce) must approve plans for fishways or other devices in power dams.

The Federal government has been in the power producing business for nearly thirty years, or since about 1907, when the Bureau of Reclamation built the first plant as an adjunct to a reclamation project and which began supplying a commercial demand. Today there are 23 of these plants with an aggregate capacity of 180,000 horsepower, an annual gross revenue

¶ "THE *sprawl of the casual Federal agency or bureau interest in power ranges from the solicitation of information as to rates in a remote town in Wyoming to whether a given utility is making so much money that Uncle Sam should take away the excessive profits. Some of the information sought would keep a staff of accountants and stenographers busy for a week. The sky is the limit.*"

of $4,300,000 and a profit, after operations and other minor charges, of more than $1,000,000 annually.

This same Reclamation Bureau, under the Secretary of the Interior, is the master power plant designer and builder for Uncle Sam. It supervised Boulder dam, designed Norris dam, and is constructing Grand Coulee and other projects in which irrigation and power are major factors.

The Army Engineers built Wilson dam, now operated by TVA, and are building Bonneville and Fort Peck dams.

TVA is running Reclamation a close second. It has completed one dam, two more are well under way, and others have been started or are planned.

You wouldn't think of the sedate Department of State being a direct party to power plant construction, but it is. Congress has authorized it to construct a reclamation power project at Caballo (New Mexico) on the Lower Colorado river, an international stream with its waters under joint jurisdiction of the United States and Mexico. The State Department, however, did not set up a construction corps or power division of its own, but turned the construction over to the Bureau of Reclamation with supervision by the American section of the International Boundary Commission.

Bearing in mind the declared purposes of Congress as expressed in the Federal Water Power Act of 1920 and in its successor, the Federal Power Act of 1935, there are sought these two major objectives—the best utilization of the water resources of the nation, and a coördination of all electric operating facilities.

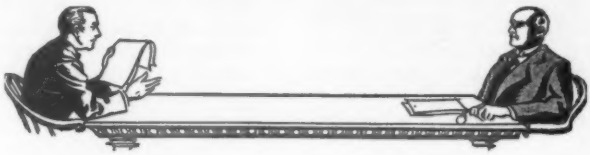
Yet, it has been pointed out that Uncle Sam himself is building big projects in areas where private or municipal plants have licenses, that this or that agency is financing municipal plants or rural line extensions on a large scale without regard to the general power picture of the future, at least so far as centralized or coördinated action is concerned.

The Public Utility Act of 1935, of which the Federal Power Act is Title II, gives to both the Securities and Exchange Commission and Federal Power Commission broad and separate powers to investigate and make determination with respect to coördination of electric facilities. And this is only one of many conflicts.

The Federal Power Commission has authority over interstate transmission lines, but the Bureau of Air Commerce and the Army and Navy Air Corps act independently with respect to power lines at or near airports or military bases.

There are, of course, some governmental agencies that deal with the electric power industry as they do any other business or corporation, and these could not be expected to work through a central agency to avoid duplications.

But there are really big fields for administrative reorganization and coördination. The development of effective and economical administration revolves around three general points: (1) the administration of water-power resources; (2) the regulation of and planning the coördination of electric power facilities; (3) the elimination of duplication in the collection and compilation of power statistics and in-



Government's Diversified Interest in Electricity

"A list of different agencies operating more or less independently of each other, even where they are in the same department, shows that as many as sixty-four, including those directly concerned, have at one time or another evinced interest in the nation's electric utility situation in one form or another."

formation from the private utilities and from the constructing and operating Federal agencies.

A leading utility executive early in 1936 complained his company had within a short time been called upon to furnish twelve or fifteen different Federal agencies with reports, based in some instances on questionnaires of the most elaborate character. The information sought by several agencies was identical, it was found. This executive's experience for the period was typical or he might have gotten off easy at that.

A list of different agencies operating more or less independently of each other, even where they are in the same department, shows that as many as sixty-four, including those directly concerned, have at one time or another evinced interest in the nation's electric utility situation in one form or another. Several have not been directly concerned; others had a purely localized interest, while many of those making casual inquiries duplicated information private utilities have been required by law to file with other Federal agencies.

The entire list is submitted. If any utility has not been contacted by most of them, its executives should not be disappointed. They will probably be reached in time by 75 per cent of those agencies whose concern is casual and sporadic. They include Federal departments, independent and temporary agencies directly concerned with electric power development and regulation or those which indirectly concern themselves with the electric industry, public or privately owned. Here they are:

General Agencies

1. The Federal Power Commission: regulates water-power development, interstate regulation of electric energy, securities, and many other functions; designed to be a central clearing house for power administrative and electric utility matters.

2. Securities and Exchange Commission: regulates holding companies, subsidiaries, and service companies, conflicting to some extent with Federal Power Commission on operating

companies, also control over security issues of all corporations under general Securities Acts of 1933 and 1934.

3. Rural Electrification Administration: makes loans for rural lines; concerned with rates and so forth, as well as financing the sale of electric equipment.

4. Electric Home and Farm Authority (temporary): promotes the use and sale of electric equipment.

5. Tennessee Valley Authority: constructs and operates dams and power plants, transmission lines, etc., sale of surplus energy, and control over rates in the Tennessee river valley.

6. Tennessee Valley Associated coöperatives: A semi-private TVA subsidiary with powers to engage in business (lately inactive).

7. National Power Policy Committee: acts as clearing house for "planning" the power policies of the Federal government.

8. National Resources Committee: investigates water resources, coördinating state and regional activities, successor to Mississippi Valley Committee.

Department of Interior

9. Bureau of Reclamation: constructed and operates 25 commercial power plants on reclamation projects, Boulder dam, Grand Coulee, and so forth; coöperates with Federal power and other agencies on water resources.

10. Geological Survey: gauges streams for power activities, coöperates with Federal Power Commission, administers public land power permits issued previous to 1920, surveys power reserves, and until July 1, 1936, collected and compiled electric production statistics and water wheel capacity (now taken over by the Federal Power Commission). It also issues permits for power lines on allotted Indian lands.

11. General Land Office: acts as recording and legal agency for Geological Survey on power reserves; collects fees for power uses assessed by survey.

12. Bureau of Indian Affairs: administers power matters for Indians, coöperates with Federal Power Commission in power activities affecting Indian lands, and allots funds received from power fees.

13. National Park Service: exercises independent control over all power operations on national park and national monument areas.

14. Bureau of Mines: concerned with the use of coal in steam generating plants; investigates relative costs of production.

15. Petroleum Division: investigates use of oil in generation of energy.

Department of War

16. Corps of Engineers: administers permits for power projects on navigable streams issued prior to 1920; coöperates with Federal Power Commission and approves plans for licensed power projects on Federal waters; constructs Federal water projects involving power, and will probably operate several of latter.

17. General Staff, War Plans Division: compiles information as to location of power plants and other information relating to national defense, superceding Council of National Defense in this respect.

18. Ordnance Bureau: compiles information as to availability of electric energy for emergency and current army industrial purposes.

19. Air Corps (U. S. Army): regulates location of power lines to vicinity of air bases.

Department of Agriculture

20. Forestry Service: administers permits for power purposes on forest reservations issued prior to 1920, assessing and collecting fees; coöperates with Federal Power Commission in field investigations and supervising licensed power projects; supervising majority of permits and licenses of

Federal Power Commission, collects information, etc.

21. Biological Survey: investigates effect of water power developments on wild life.

22. Bureau of Chemistry and Soils: investigates and makes experiments affecting the electrical industry.

23. Soil Erosion Service: studies effect of power developments on soil erosion problems.

24. Bureau of Agricultural Economics: studies development, makes experiments in the use of electric equipment on farms.

25. Bureau of Home Economics: studies and experiments with the use of electric equipment in rural homes.

26. Agricultural Adjustment Administration, Consumers Council: furnishes information as to electric rates and services sought by local consumers councils.

Department of Commerce

27. Bureau of Fisheries: investigates effect of power dams on fish, prescribes fishways or other devices, etc.

28. Bureau of Air Commerce: regulates location of power lines in vicinity of air ports and proposes regulations to require illumination of high tension lines near air routes.

29. Bureau of Foreign and Domestic Commerce (electric division): furnishes data on sales, production, etc., of electric power.

30. Bureau of Census: collects general and specific statistics on various phases of the industry.

31. Bureau of Standards: experiments, calibrating, etc.

32. Coast and Geodetic Survey: furnishes basic information for power and other surveys.

Department of State

33. International Boundary Commission, United States-Mexico (conducted in close coöperation with, although not properly a part of, the State Department): exercises control over international streams, construction of Caballo, New Mexico, power-irrigation project, appropriation to State Department, construction by Bureau of Reclamation.

34. International Joint Commission (American section), United States-Canada: grants approval of permits or licenses in international streams required.

35. Treaty Division: supervises rights of United States with respect to water power on international streams.

Post Office Department

36. Postmaster General: charged with the enforcement of Title I, Public Utility Act, 1935, barring use of mails to holding companies engaged in interstate commerce which fail to register with Securities and Exchange Commission.

37. Division of Building Operations and Supplies: controls the fur-

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nishing of energy, equipment, water, etc. to Federal buildings.

Department of Labor

38. Bureau of Labor Statistics: studies and reports on industrial working conditions, etc.

39. Division of Labor Standards: studies and reports on industrial labor disputes.

40. U. S. Conciliation Service: functions in industrial labor disputes.

Federal Emergency Administration of Public Works (PWA)

41. Power Division (PWA): reviews and makes recommendations as to loans and grants to states, districts, and municipalities, and public institutions for power plants, and loans to private corporations for electric installations, railroads, subways, etc.

42. Federal Projects Division: reviews and makes recommendations as to allocations of public funds for Federal establishments.

43. Housing Division: installs appliances and contracts for electric service (included in rent) for tenants of low-cost housing projects.

44. State offices (more than 40): investigate and report on applications for power projects by states, districts, and municipalities.

Treasury Department

45. Internal Revenue Bureau: collects specific tax on energy, and general taxes on industry and business.

46. Procurement Division: supervises utility rates and services to Federal establishments.

47. Reconstruction Finance Corporation: may make loans for utility purposes; in charge of liquidation of "closed" banks; purchases bonds of municipalities taken in by PWA as collateral for local power plant loans.

Miscellaneous

48. Federal Trade Commission: investigational authority as to fair practices; conducted 8-year investigation of electric and gas utilities.

49. Committee on Coördination of Power: applies largely to New York city situation.

50. Department of Justice: acts as clearing house for Federal legal matters affecting industry, and Federal projects.

51. Interstate Commerce Commission: makes recommendations and supervises electrification of railroads, etc.

52. Federal Reserve Board: secures from industry current figures on production and consumption for use in business indices.

53. United States Board of Tax Appeals: secures information from industry affecting utility tax matters.

54. Central Statistical Board: seeks to coördinate collection, compilation, and dissemination of all official statistics, including those dealing with power.

55. National Archives: acts as depository for all rules and regulations and orders of general application affecting industry.

56. Social Security Board: deals with the power industry as with any other group of employers, but will duplicate statistics gathered by other agencies.

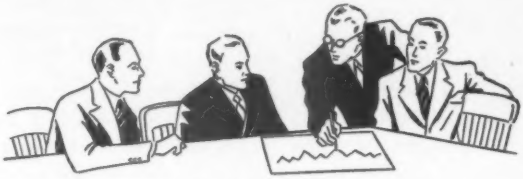
57. Bituminous Coal Commission: investigates effect on coal industry and labor of various power developments.

58. National Academy of Science and National Research Council: investigates, examines, experiments with, and reports on various subjects upon request.

59. Federal Housing Corporations: supervises utility rates and services with respect to housing expansion, etc.

60. Federal Board of Surveys and Maps: coördinates map-making affecting power reserves, etc.

61. Veterans Administration: controls power line locations on veteran facility areas.



Diversified Power Control

"THE Federal agency interest in power is sprawled all over the lot of the vast governmental set-up in Washington, with no centralization of control or supervision over the myriad activities, many incidental or insignificant in themselves, but in the aggregate representing time, effort, and expense for which the Treasury pays, and constituting no small burden on the utility industry, public and private."

62. Works Progress Administration: concerned with use of relief labor on power projects constructed with Federal funds.

63. Resettlement Administration: supervises electric and power facilities on R. A. projects.

64. Coördinator of Industrial Coöperation: tries to coördinate administration policy with all industries.

65. President's Committee on Economic security: studies the relation of the electric industry to the particular objectives of this committee.

66. National Labor Relations Board: acts as mediator in industrial labor disputes, etc.

67. Federal Tariff Commission: studies and reports on the importation of electrical equipment and electric power.

IN connection with the foregoing roster of Federal agencies touching on the electric power field, it should be reiterated that the degree of their interest varies widely. Some, of course, such as the TVA, the FPC, and the Power Division of the PWA, are in the field of power right up to their necks. Others merely peck (or bite) at the subject in passing. However, the list does show the vast extent of the Federal government's interest in power.

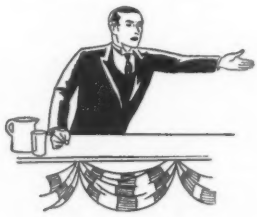
Again, it must not be assumed that the writer suggests any arbitrary shake-up of these agencies to such an extent that a local postmaster would be afraid to ask the amount of his office electric bill without routing his request through some Federal "clearing house" in Washington. On the contrary, it must be recognized that as far as certain phases of the government's contacts with the power industry are concerned, full and independent liberty of action should be preserved for individual departments. To rule otherwise, or to have an iron-bound restriction as to two, three, or four channel clearings for all contacts between the government and the power utility industry would be merely to force regulation into a strait-jacket and perhaps

produce more capricious and arbitrary red tape than ever.

However, it is not too much for the industry to expect that a fair amount of the duplication could be eliminated. It is not too much to ask, for instance, that if, as, and when some bright, well meaning official of some random government bureau decides it might be a good thing to look into electric rates in certain cities, it might be well for him to check first with other government departments and find out (as he surely would) that such information is already being systematically assembled by no less than four other government bureaus, before he launches blithely into an independent mimeographed questionnaire investigation of his own.

Unfortunately, such well-meaning officials are sometimes not only ignorant of such duplication, but actually resist the suggestion that they go to other government bureaus even after the duplication is brought to their attention. They want their own "original data." They don't want second-hand information collected by another (and often a rival) bureau. This issue of inter-bureau jealousy or sensitiveness is far more widespread than might be supposed outside of Washington.

To get down to specific brass tacks on the situation would require more space than would be practical here. It would require at least a whole separate article to etch the outline. However, this writer believes that reorganization can be effected without straitjacketing Federal regulation or restricting departmental independence. All that was intended here was to show that Uncle Sam has on his hands a regulatory Topsy as far as the power field is concerned. How to reorganize and rationalize Topsy, we shall leave until a later date.



Do Labor Demands Mean Utility Socialization?

"The program of railroad labor for a 30-hour week means an increase in the cost of operating the railroads alone of over $600,000,000 a year. This demand completely ignores the ability of farmers and shippers to pay and the rights of investors. If enacted, it will destroy the whole credit position of the railroad system of the country. It is simply a part of a general scheme to force government ownership of railroads, and government ownership of any one form of transportation means government ownership of all. It represents the first definite move towards a socialization of basic industry."

—Donald D. Conn,
Executive Vice President, Transportation Association of America.

Financial News and Comment

By OWEN ELY

Elevated Transit Lines Outmoded

With hearings about to be closed before the transit commission on the unification plan for New York city tractions, probabilities still appear strongly against any immediate agreement for ratification of the Seabury-Berle plan. The two basic difficulties, for which the plan does not provide any satisfactory solution are (1) the fact that the elevated lines are not self-supporting and (2) doubt whether the 5-cent fare is sufficient to earn a fair return on cost of all combined properties, including the city's "white elephant," the independent subway. The real solution would seem to be to tear down the elevated lines as quickly as possible—a beginning already has been made—thereby increasing realty values and diverting traffic to the underground railways with their lower upkeep and more efficient operation. Since the city and the security holders are somewhat in partnership, and the city will benefit by increased realty valuations, it would seem that it should share the loss with security holders. But presumably such a plan must be carried out piecemeal after the present unification program has been definitely abandoned.

An increase in the 5-cent fare might not prove satisfactory, since it would drive considerable business to the bus lines. Other cities such as Boston and Chicago have found that increased fares are not an effective solution. Chicago, like New York, also has made several attempts at "unification," without success. Mayor Kelly recently issued a 45-page solution for that city's traction troubles. His proposals, which have been well received in the press, include the development of superhighways and subways to replace surface and elevated lines. Existing transportation companies would be unified and supervised by a new, non-political commission — similar to that proposed for the New York tractions. A city fund, of which about $45,000,000 is said to be available, would be supplemented by Federal funds to build a loop subway (replacing the present unsightly elevated "loop")—and the east-to-west elevated would become a superhighway for busses and autos. Probably the first and most practicable step would be to increase bus service.

Utility Stocks Continue Disappointing Marketwise

While utility stocks showed some signs early in 1937 of emerging from the "dead level" of the previous months, the Dow Jones average advancing from 34.66 to 37.54, at least part of this rise appeared to be due to hopes of a favorable decision from Judge Mack on the Utility Act. However, the average succeeded in retaining about half its gain when the decision was announced, since utilities were assured that registration would not deprive them of constitutional rights. The later report that American Water Works & Electric Co. and North American Company were considering

registration in order to expedite their refunding programs resulted in temporary strength in these issues.

Utilities as a group, however, failed to follow the February advance in industrial and rail stocks. Announcement of the President's new program for speeding up the judicial system (including what appeared to be a proposal for "packing" the Supreme Court) resulted in a break in stocks on February 5th. While rail and industrial stocks quickly regained the lost ground and continued to advance, utilities thus far have lagged. Possibly the realization that expenses and taxes are on an upward trend, while rates cannot easily be adjusted to increased overhead, accounts in part for lack of market interest.

New Financing

NEW utility offerings in the fortnight ended February 13th included $18,000,000 Atlantic City Electric Company general 3¼s of 1964 at 101; $75,000,000 Northern States Power Company first refunding 3½s of 1967 at 101; $16,000,000 Dallas Power & Light Company first 3½s of 1967 at 102¾; and $2,238,000 Pennsylvania Water Company first "A" 3½s of 1967 at 102.

Comparatively little new financing appears to be scheduled for the near future, presumably due to the decline in the bond market. The SEC registration calendar, as compiled by Dow Jones, includes the following: $31,000,000 Detroit City Gas Company first 4s of 1957 and $5,000,000 4 per cent notes of 1938–47; $6,000,000 Broad River Power Company first 4½s of 1966; $1,000,000 Greenwich Gas Company first 4s of 1956; $7,250,000 Southwestern Light & Power Company first "A" 4s 1967; $14,200,000 Iowa Public Service Company first 3⅜s of 1967 and $2,200,000 debenture 3-5s of 1938-47. No important stock issues are listed with the exception of 130,000 shares of Washington Gas Light Company, the offering of which has been postponed from time to time.

Recent utility issues have naturally been affected by the dip in high-grade bond prices. Following are the current bid and asked quotations on some issues, compared with the offering prices:

	Bid and Asked	*Offering Price*
American Tel. and Tel. 3½s	99½–100½	102
Atlantic City Electric 3¼s.	100 –101	101
Consumers Power Co. 3¼s.	101⅛–102	102¼
Dallas Power & Light Co. 3½s	102¾–103	102¾
Houston Lighting & Power Co. 3½s	102⅜–102¾	103
Missouri Power & Light Co. 3¾s	100½–100⅝	102
Northern States Power Co. 3½s	100 –101	101
Ohio Edison Co. 3¾s	99⅜– 99⅝	103

Chicago Rapid Transit Bonds

MEANWHILE, however, security holders of the Chicago elevated lines are interested in the more immediate situation, which has been summarized as follows by G. D. McKeever in the *New York Investment News:*

> The Chicago Rapid Transit Company, controlled by the Commonwealth Edison Company, has been unprofitable as a going concern since 1930, and its ability to support its capitalization even in prosperous times is questioned because of the inadequate rate of depreciation charged to earnings. With proper provision for depreciation and retirement or replacement of property it appears open to question that present traffic, representing a 45 per cent decline in a decade, would provide much return on capital regardless of how the road is reorganized, and prospects of recovery of traffic do not appear too bright. Recovery in number of fares has been only about 2 per cent since the low of 1933, due to the effect of the growing use of the private cars and competing surface transportation systems which consist of both the street railways and bus lines. . . . The elevated system is at an undoubted handicap with a 10-cent fare, while the fare on the surface lines is 7 cents single, or three rides for 20 cents . . .
>
> Chicago Rapid Transit issues are currently selling at prices ranging from one-third to one-half of recently estimated valuation of real estate alone owned by the company. Since these values would be recoverable only by liquidation of the company, which is not in prospect, market prices are not expected to approximate them. . . . The rumor that the Chicago Rapid Transit Company, now in receivership, may

file for reorganization under Section 77-B stresses the greater importance of relation of earning power to funded debt. By this comparison the obligations of the Chicago Rapid Transit seem to be fairly "in line" with values. . . . The junior first refunding 6s and 6½s, having a greater degree of leverage, afford somewhat better appreciation possibilities in the long run than the five first mortgage divisional liens in the case earnings are to improve.

General Telephone Corporation

GENERAL Telephone Corporation, largest of the independent domestic telephone systems, was incorporated in February, 1935, as successor to Associated Telephone Utilities Company, reorganized under 77-B. It is a holding company whose subsidiaries serve without competition a total population of over 3,200,000 in sixteen states (Wisconsin, Michigan, Illinois, Indiana, Ohio, Kentucky, Oklahoma, Louisiana, Texas, New Mexico, California, Washington, Idaho, Montana, New York, and Pennsylvania). Some twenty-four companies, including some holding coporations, compose the system. All properties are connected wth American Telephone and Telegraph Company's long-distance toll lines.

System assets (as of December 31, 1935) amounted to about $77,000,000, with capitalization of the system as follows:

Subsidiaries' funded debt	$29,066,800
Subsidiaries' preferred stock	8,234,433
Minority interest in subsidiaries	419,576
Parent company preferred stock ($3 cum. conv.)	73,513 shares
Parent company common stock	687,223 shares

An important subsidiary, Indiana Central Telephone Company, is in process of reorganization but is expected to remain associated with the General Telephone Corporation, which owns practically the entire unsecured debt as well as all the stock of the company.

The system reorganization, together with recent improvement in business, has apparently placed the new company on a sound earnings basis. In the twelve months ended September 30, 1936, $17.38 per share was earned on the $3 preferred stock and $1.52 on the common, compared with $9.72 and $0.79 respectively in the corresponding previous period. Fixed charges were earned about 1 2/3 times.

The company has emulated American Telephone and Telegraph by making generous allowance for maintenance and depreciation, each of these items amounting to about 17.5 per cent of gross revenues in the twelve months ended September 30th (the Bell System in 1935 expended about 18.6 per cent for maintenance and 18.3 per cent for depreciation). General Telephone's accrued reserve for depreciation in 1935 amounted to only about 15 per cent of plant value, however, as compared with nearly 25 per cent for American Telephone.

THE company's current position at the end of 1935 (based on the consolidated system balance sheet, exclusive of General Telephone Allied Corporation) appeared excellent, cash amounting to $7,521,758 compared with total current liabilities of $1,851,369. A lengthy footnote, however, indicated certain direct and contingent liabilities in connection with the completion of reorganization which might affect cash.

The $3 preferred stock is currently selling around 51 on the New York Curb Exchange, the 1936-7 range being 47-52½. With recent earnings at a rate nearly six times the dividend, the stock offers an attractive yield of nearly 6 per cent. The conversion feature (into one share of common) is not of particular interest at this time, however.

The common stock, currently about 22½ on the Curb (range about 12-24), yields 6½ per cent based on the $1.35 total dividends paid last year.

December Earnings Reports

POSSIBLY due to year-end adjustments for taxes and other items, December

earnings statements have been slow to make their appearance. Reports of leading companies now available include the following:

Commonwealth & Southern Corporation in the twelve months ended December 31st earned 13 cents per share on the common stock, compared with one cent for the previous year. Fixed charges were earned 1.31 times compared with 1.23 in the previous year; and $8.90 per share was earned on the preferred stock against $6.27 last year. For the month of December net income before preferred dividends showed a gain of about 46 per cent over last year.

Pacific Lighting in the calendar year 1936 (preliminary) showed a slight decline in earnings due to increased expenses, taxes, and depreciation. Earnings on the preferred stock were $37.72 a share, against $41.62 for the previous year; and on the common stock $3.88, against $4.35.

Public Service Corp. of New Jersey in its preliminary statement for 1936 reported earnings on the common stock of $2.68 per share against $2.53 in 1935. Fixed charges were earned 2.89 times compared with 2.67 times in 1935.

While the consolidated net earnings of Stone & Webster were reported in December to be currently at the rate of about $1,800,000, all of these earnings will not be "carried through" and net earnings of the parent company for 1936 were estimated at about $800,000. The engineering department was expected to show net income of at least $250,000, nearly three times that of the previous year, but securities profits were expected to be much smaller. The engineering department was reported to have about $18,500,000 uncompleted business on its books, with a further substantial increase indicated, of which about 4 per cent might be carried to net income for the engineering division (during 1937 or later).

DOW JONES estimates Commonwealth Edison's 1936 earnings at over $6.60 a share on the present stocks. Giving effect to the proposed recapitalization, net per share on the new stock was estimated at about $1.70.

Consolidated Gas, Electric Light & Power Co. of Baltimore in the twelve months ended December 31st earned $28.67 per share on the preferred stock, compared with $28.07 in 1935; on the common stock, $4.52, compared with $4.41. Fixed charges were earned 3.27 times in 1936. Net revenues from operations declined slightly, but the decrease was more than offset by lower fixed charges.

Detroit Edison Company in the twelve months ended December 31, 1936, reported fixed charges earned 2.70 times, against 2.46 for 1935; earnings on the common stock were $8.39, compared with $7.61. Dividend payments aggregated $6, against $5 in 1935.

Peoples Gas Light & Coke Company in the year ended December 31, 1936, earned fixed charges 1.49 times, against 1.21 in 1935; and earned $3.09 per share, compared with $1.52 for the previous year. Gas sales and other operating revenues increased about 8 per cent, while expenses and cost of gas purchased under contract increased only 6 per cent. This differential together with increased miscellaneous income and reduced fixed charges resulted in the doubling of per-share earnings.

American Telephone and Telegraph Company (parent company only) in the quarter ended December 31st earned $3.22 per share, compared with $1.88 in the last quarter of 1935; and for the twelve months ended December 31st $9.36, compared with $6.74 in 1935 (figures for December, 1936, partly estimated). The Bell System in the three months ended November 30th earned $2.70, compared with $2.02; in the twelve months ended November 30th $9.54 was earned against $6.83. Fixed charges of the parent company were earned over eight times and for the Bell System over four times for 1936.

THE Bell System ended 1936 with the number of its stations within one million of the record peak. A further recovery was shown for January, with

new stations added during the month (95,600) about 70 per cent ahead of the gain in the like month last year. The figures for January of this year are not strictly comparable with those for previous years, however, as beginning with 1937 figures for Southern New England Telephone and Cincinnati & Suburban Bell Telephone Co. are not included, while this year's reports include figures for other subsidiaries not formerly represented.

Brooklyn-Manhattan Transit Corporation in the six months ended December 31st (first half of the fiscal year) earned $2.41 per share on the common against $1.92 in 1935. Net income in the month of December showed a gain of about 6 per cent over last year compared with about 17 per cent for the six months period. The company's subsidiary, Brooklyn & Queens Transit Corporation, continued to make a poor showing, reporting $1.19 earned on the preferred stock compared with $1.94 in the similar period of 1935. In the month of September net income was $93,515 compared with $147,477 in 1935. The decline was due to the more rapid rise in expenses than revenues, together with a substantial increase in taxes.

The Interborough Rapid Transit Company in the six months ended December 31st (preliminary) showed a modest gain in gross and net from subway operations but this was apparently more than offset by decreased net revenues from the elevated division. The latter showed a decline in gross both for December and the six months. It seems probable that the new bus lines as well as the extended Independent System diverted traffic from the I.R.T. in 1936.

Second Grade Utility Bonds

In the FORTNIGHTLY for January 2, 1936, a list of second grade bonds selling below par and yielding about 4 per cent to 11 per cent appeared in this department. Most of these bonds have advanced substantially during the past year and a few are selling above their call prices. In the accompanying table the latter have been eliminated and bonds rearranged in the order of current yields to maturity (earnings figures are approximate):

	Price about	*Yield to Maturity*	*No. Times Charges Earned in 1936*
Pennsylvania Electric 1st & ref. 4s, 1971	101½	3.92%	1.7
Peoples Gas Light & Coke 1st & ref. 4s, 1981	98	4.10%	1.3
Utah Light and Traction 1st & ref. 5s, 1944	105	4.13%	1.5
Pennsylvania Central Light & Power 1st 4¼s, 1977	105	4.25%	1.7*
Northern Indiana Public Service 1st & ref. 4¼s, 1970	104	4.30%	1.4*
Utah Power & Light 1st 4½s, 1944	101	4.32%	1.5
Minnesota Power & Light 1st & ref. 4½s, 1978	102	4.39%	1.8
Carolina Power & Light 1st & ref. 5s, 1956	105	4.60%	1.8
Central Ohio Light & Power 1st 5s, 1950	103½	4.65%	2.0
Empire District Electric 1st & ref. 5s, 1952	103	4.72%	1.5*
Northwestern Public Service 1st 5s, 1957	103	4.75%	1.9
West Penn Electric Deb. 5s, 2030	105	4.75%	1.8
Arkansas Power & Light 1st & ref. 5s, 1956	103	4.76%	1.6
Tide Water Power 1st 5s, 1979	103½	4.79%	1.6
Georgia Power 1st & ref. 5s, 1967	103	4.79%	1.8
Central Illinois Public Service 1st 5s, 1968	103	4.81%	1.5
Alabama Power 1st & ref. 5s, 1956	101	4.92%	1.7
South Carolina Power 1st & ref. 5s, 1957	101	4.92%	1.6
Alabama Power 1st & ref. 4½s, 1967	93	4.94%	1.7
Cities Service Gas 1st 5½s, 1942	102	4.98%	1.9*
West Texas Utilities 1st 5s, 1957	100	5.02%	1.5
Illinois Power & Light 1st & ref. 5½s, 1954	105	5.05%	1.3
Nevada-California Electric 1st trust 5s, 1956	99	5.10%	1.6
New England Power Association deb. 5s, 1948	99	5.11%	1.5
Indiana Hydro-Electric 1st 5s, 1958	97½	5.14%	1.8
Mississippi Power & Light 1st 5s, 1957	98	5.15%	1.6
Central Power & Light 1st 5s, 1956	97½	5.19%	1.5
Virginia Public Service 1st & ref. 5½s, 1946	102	5.21%	1.5
Kentucky Utilities 1st 5s, 1961	96	5.27%	1.6
Electric Power & Light deb. 5s, 2030	94½	5.30%	1.4
Continental Gas & Electric deb. 5s, 1958	96	5.30%	1.6
Puget Sound Power & Light 1st & ref. 4½s, 1950	90	5.50%	1.5
Central Power 1st 5s, 1957	93	5.57%	1.4
American Power & Light deb. 6s, 2016	104	5.60%	1.4
National Power & Light deb. 6s, 2026	107	5.60%	1.4
Southwestern Power & Light deb. 6s, 2022	102½	5.84%	1.4
Pacific Gas & Electric 1st prior lien 5s, 1955	90	5.87%	1.6
American & Foreign Power deb. 5s, 2030	85	5.89%	1.4

Georgia Power & Light 1st 5s, 1978	86	5.90%	1.1
Power Securities collateral 6s, 1949	101	5.91%	1.6*
United Light & Railways deb. 5½s, 1952	95	5.95%	1.6
Tennessee Electric Power 1st & ref. 6s, 1947	100	6.03%	1.9
Tennessee Public Service 1st & ref. 5s, 1970	83½	6.14%	1.7
Portland General Electric 1st & ref. 4½s, 1960	73½	6.62%	1.4
United Light & Power deb. 6s, 1975	87½	6.94%	1.4
United Light & Railways (Me.) deb. 6s, 1973	87½	6.95%	1.4
New England Gas & Electric deb. 5s, 1947	84	7.05%	1.2
Cities Service Power & Light deb. 5½s, 1949	75½	8.68%	1.2

*Earned in 1935.

Flood Damage to Utilities

IT is impossible to estimate as yet how much of the total flood loss in the Middle West—estimated at some half a billion dollars—will be borne by utility companies. The following is quoted from *Barron's* (February 1st issue):

> Utilities in the affected areas probably suffered sizable losses as a result both of suspended services and property damage to distributing facilities and meters. Generating plants were probably injured to some extent. Columbia Gas & Electric Corporation operates over a considerable area in the Ohio valley, serving both electricity and gas in Cincinnati, and giving some utility service in other communities in the valley east of Cincinnati. Generating plants apparently were not greatly injured, since it was reported that electric service could be resumed in forty-eight hours after the water had receded. For the most part, gas service has been maintained. Louisville Gas & Electric Company, a Standard Gas & Electric subsidiary, furnishes electricity and gas to Louisville and neighboring territory. This area apparently suffered greater damage than the Cincinnati territory. Telephone and telegraph companies will have a repair bill of unknown dimensions.

Corporate Notes

MR. J. D. Ross, Superintendent of the City Light Department of Seattle and former SEC member, has proposed that the city purchase the properties of the Puget Sound Power & Light Co. in Seattle and vicinity on a valuation of $37,370,000. The proposal is being held in committee by the city council pending settlement of a refinancing and modernization program of the municipal railway. The purchase would mean a large annual saving through elimination of duplication, according to Mr. Ross. The balance of the company's properties in King county might be absorbed by rural power districts (of which fifteen have already been organized), and it was thought that this would be taken care of by a banking syndicate.

Commonwealth & Southern's contract with TVA for the purchase of power, which ended February 3rd, has not been renewed. The TVA had stated that no extension would be made if Commonwealth's subsidiaries "continued to insist upon receiving as a condition of purchasing Tennessee Valley Authority power an exclusive monopoly over Tennessee Valley Authority power in the area served by the companies." The Commonwealth & Southern system had been the government's largest customer, buying $870,000 of power in 1936 and $500,000 in 1935. New connections or steam power plants will be used to replace the power formerly bought from the government. Mr. Wilkie stated "the suggestion has been made that the government purchase all of our generation, transmission, and distribution systems; or buy one of our companies; or a lesser generation, transmission, and distribution system. If the TVA desires us to make a joint study of any of these possibilities, we shall be glad to explore the same with them. It is our belief that if the Federal government desires to acquire some of our distribution systems that there should be an understanding that the government will not compete with the balance of our distribution systems."

Mr. Willkie recently issued a 60-page discussion of the 1936 annual report of the TVA in which he claimed that the Authority's operations showed inconsistency and unfairness. The TVA, he stated, "seeks to impress Congress with the magnificence of its accomplishments to the end that there may be no let-up in the flow of public funds. . . ."

What the State Governors Are Talking About

Excerpts from recent inaugural addresses or opening messages of various state governors on subjects of interest to those especially concerned with the regulation or operation of public utilities.

Governor Herbert H. Lehman of New York

Municipal Plants

"SINCE the last annual message we have had another year's experience in the administration of the comprehensive public utility program which I submitted to the legislatures of 1933 and 1934 and which was then enacted.

"The attack in the courts by utility companies upon the legislation has continued, but in no instance has any of the statutes been declared unconstitutional. And the one against which the most severe attack was made—the statute authorizing the commission to fix temporary rates upon the basis of original cost less depreciation—was recently approved by the court of appeals.

"In the past three years, we have had reductions in rates amounting to $32,000,000 annually. In this month alone we will have $7,000,000 of rate reductions and refunds. These savings to consumers are not confined to one class of utilities, but effect electric, gas, telephone, water, and steam services. Of course, they relate principally to electric consumption."

Rate Reductions

"THE commission held in the Boonville case that the rates charged by municipally owned and operated plants should be limited to the actual cost of service. This decision was challenged. And the court of appeals last fall stated that the legislature had not conferred upon the commission sufficient power to make such a ruling. The court, however, indicated it would be perfectly valid for the legislature to grant that power to the commission.

"I believe the commission should have full authority to limit the rates charged by municipalities to the actual cost of rendering service. Such cost, of course, would contain all proper elements of charge so that the taxpayers will not be called upon to make good any deficiencies in capital or in operating expenses. Moreover, it is fair to include an amount estimated to be equal to the taxes which would have been paid to the municipality by a private plant. The commission should be given the power to act promptly to reduce rates whereever municipalities attempt to burden consumers with rates in excess of the cost of service.

"The reasons are readily apparent and convincing. The authority to conduct municipal power plants was certainly not granted in order to overcharge one class in a community for the direct benefit of another class. Municipal plants are established to render utility services at the lowest possible price. Charging consumers more than cost nullifies the primary purpose of municipal plants."

Depreciation Accounting

"ANOTHER recommendation growing out of litigation which has taken place during the last year affects the power of the commission to determine the method of accounting for depreciation. In other states and in the

Federal government, commissions can deal adequately with this matter; but in a recent decision of the court of appeals, it is indicated that the commission's authority to prescribe depreciation accounting is not full and complete. This requires clarifying legislation at this session."

Submetering Companies

"THE governor's office has from time to time received complaints against the practices of 'submetering' companies, which buy electricity or gas from public service corporations and sell it to their tenants. The tenants are obliged to accept such service and to pay what the submeterers charge or do without it. The tenants cannot obtain service directly from the public utilities, since the landlord controls the property connecting with the mains of the utility.

"Those who have engaged in this business are not subject to any form of regulation or control whatsoever. The public service law does not apply to them. For example, they may exact any deposit they wish and may refuse to pay interest thereon. There have been instances where tenants were unable to get back their deposits from the submetering companies.

"This class of business is confined almost entirely to the large cities and in fact there is very little of it outside of the city of New York. The amount has been reduced in the last few years, but considerable still exists. In order that consumers may be protected, I recommend that an act be passed to regulate the practices of these submetering companies."

Service at Lowest Rates

"IN my last message to the legislature, I proposed a change in the law requiring that every consumer shall receive the benefits of the lowest rate being paid by any consumer in his class. Again I urge it.

"I renew the recommendation, rejected last session by the Assembly, for the more strict control of business relations and transactions between a public utility and its officers and directors who may deal with it in a personal capacity or through corporations in which they are interested. The abuses of cost plus construction contracts and similar practices are too well known. Their immediate eradication is necessary."

Hand-set Telephones

"THE telephone utility companies have long been imposing a surcharge for hand-set telephones. Though recently reduced by the public service commission, the surcharge still collects considerable sums of money. The time, I believe, has come to put an end to this practice. And therefore I urge that the public service commission give its immediate attention to the complete elimination of the surcharge on hand telephones. The information recently disclosed by the Federal Communications Commission should prove helpful."

Governor George H. Earle of Pennsylvania

Enlarging Utility Status

"WE have it in our power to provide justice at last for the consumer and ratepayer who have suffered from monopolistic practices of public utilities. I favor appointment of a committee to study the question of monopolistic practices in the gasoline and oil industry, particularly price wars and price fixing. My recommendation is that your honorable body consider the feasibility of including under public utility regulation all natural and manufactured gas, gasoline, and oil, and possibly coal. However, I might suggest that you delay final decision on this point until after the committee studying the 'bootleg' coal problem and the gasoline and oil industries present their reports, particularly since these industries are vital not only to the state but to the Nation as well."

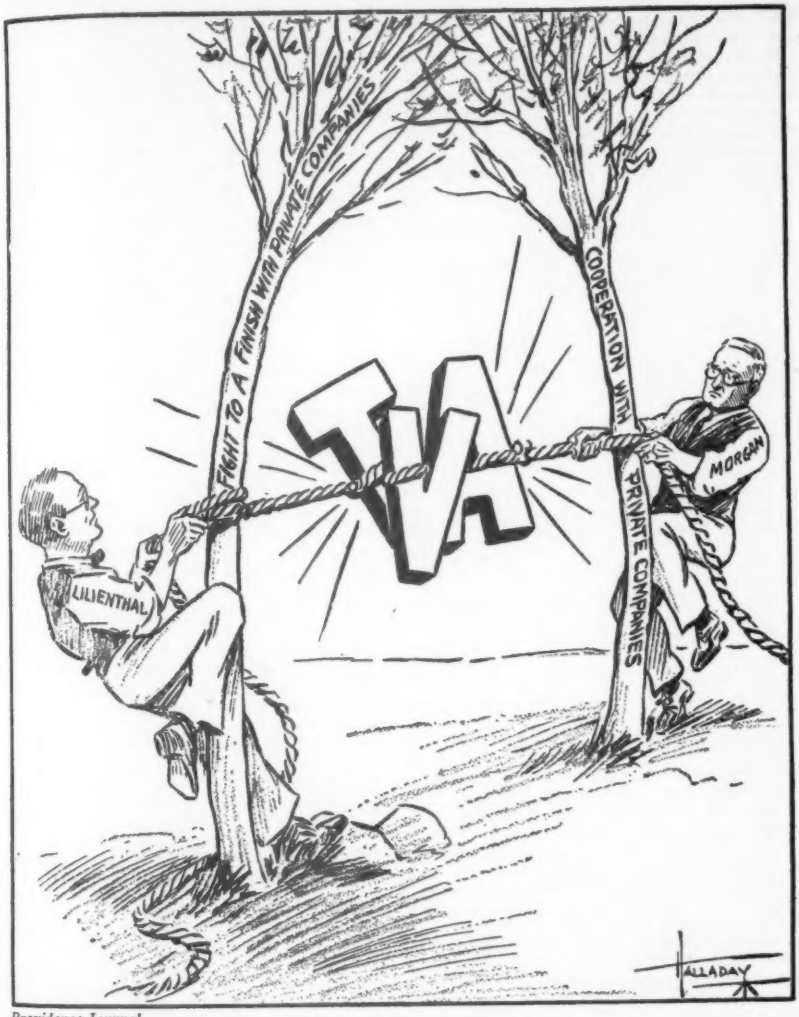
Ripper for the Commission

"ANY satisfactory revision of our present public service laws must contemplate abolition of the present public service commission, and the establishment of a public utility board with much wider powers. It must provide that the burden of proof and the cost of litigation in rate cases, within reason, be borne by the utility company stockholders and not by the board or the ratepayer. To this end the board should have power to fix temporary rates during litigation. It should pass on all contracts between operating and holding companies."

Governor William Langer of North Dakota

Water Conservation

"THERE is no matter of greater importance to the welfare of our state and the ultimate relief of our people than the restoration of the water supply normally present. It is not necessary for me to emphasize that soil erosion, loss of crops, the pov-



Providence Journal

PULLING AND HAULING

erty and distress of our farmers, are largely due to the lack of an adequate water supply. The tragic recession and disappearance of our lakes and streams and the lowering of water levels compel us to do something to relieve this situation.

"Our efforts heretofore in this direction have been sporadic or occasional. In many respects, it has been the work of voluntary organizations. In my former administration, without funds and without any particular legislation, I was able to secure the building of many dams in streams and water-courses in this state, the present benefits of which are now illustrating what can be done.

"Already in Montana, the Fort Peck project will retain vast quantities of water, not only for Montana, but also for North Dakota; and at the same time it will relieve flood conditions in the South. The use of the Missouri river and the run-off waters which it carries, as well as the use of the Red lake and Red

river waters and watersheds, are matters for your attention and action.

"I recommend that the legislature take command through the establishment of a commission and the creation of a program in full coöperation with the Federal government. I recommend immediate action through the appointment of a special joint committee of this legislative assembly, not only to consider, but also to take action."

State Industries

"SINCE the World War, we have witnessed in this state the growth and development of state controlled, operated, regulated, or supervised industries or activities which formerly were largely left to private enterprise. The Hail Insurance department, State Fire Insurance, the State Bonding Law, the Workmen's Compensation Fund, and its operation, the regulation of railroad rates, auto transportation and utilities, and the supervision of mines and mining, the bank of North Dakota, and the State Mill and Terminal Elevator are illustrations of this growth and development. And during this time we have seen even a further degree of development and progress by our Federal government in every field of industry, trade, and commerce.

"These matters are for our consideration. They are here to remain with us under the progress of the age. They represent problems that require our study and our coöperation.

"The bank of North Dakota, established under strife and contention, has now become an institution of recognized aid and service to the people of our state. We must protect it in its stability, and conserve it as an institution of state government, formed for the protection of all public funds and serving our people to aid and not to destroy those concerned with banking and banking principles.

"The State Mill and Terminal Elevator, also established with strife and contention and also a subject of criticism and debate among our people, is a state institution intended to aid and to serve the producers of our state. It presents problems that also require our mutual coöperation to render it an agency of greater service to the people of our state. We must recognize and we must coöperate to establish that this institution is here to remain and to serve for purposes of aid to our producers. Some of these purposes are to demonstrate the superior quality of the grain that North Dakota produces, and to demonstrate that our native products should be manufactured and prepared for sale here at home. Also, to demonstrate further that our grain, for storage requirements and for feed requirements, ought to be kept at home in storage reservoirs which we ought to establish and ought to maintain. The main criterion in the operation of the State Mill should be that it is here to build up North Dakota and North Dakota's industries, and even private mills within our state, and that it does not seek to destroy them."

"THIS State Mill should have further the fundamental policies that its requirements must be the use of the North Dakota grain for the manufacture of flour and particularly spring wheat; and that it is not necessary at any time to go into foreign states for importation of wheat for purposes of manufacturing flour simply as an institution of profit. It also can be used as a demonstration agency to recognize that the important transportation agencies for North Dakota are our railroads, and that truck transportation should be utilized only so far as it is necessary and incidental to railroad transportation of our grain or its manufactured products. The records of the State Mill and the records of all of our institutions must be made an open book, so that suspicion may not be aroused at any time."

Legislative Recommendations

"I RECOMMEND a sufficient appropriation to the board of railroad commissioners to enable the state to coöperate with the Federal government in its plans for rural electrification and hope that this legislature will leave nothing undone to, as far as possible, enable every farm home to secure the benefits of cheap electric lights and power. Much of the drudgery of farm life will be eliminated, especially for the women, by progressive legislation.

"I recommend that the state establish their own power plants in some of the state institutions, especially the Agricultural College and the State Teachers' College at Mayville, unless lower lights, heating, and power rates are secured from the companies now furnishing them.

"I recommend legislation looking towards the doing away with censorship of speeches delivered over the radio, and unless that censorship of private individuals, corporations, or lawyers of corporations can be removed, and free speech prevail in North Dakota over the radio, that you appropriate sufficient money to thoroughly equip the radio station at Grand Forks, now owned by the state, and that the same be placed under the jurisdiction of the Industrial Commission, with the provision that rules be established whereby all parties and political factions may give their views without censorship.

"I recommend the establishing of a flax-crushing plant in the State Mill and Elevator to be constructed with Federal aid."

WHAT THE STATE GOVERNORS ARE TALKING ABOUT

Governor Robert E. Quinn of Rhode Island

Uniform Utility Tax

"THE tax on public utilities should also be revised and made uniform. There is no reason why one form of taxation should apply to the telephone company and another to the electric or gas company. A tax of 3 per cent on the gross earnings of public utilities in place of the present tax of 1 and 2 per cent, and local assessments, might be more equitable for all concerned.

"In connection with the matter of public utilities, I recommend that the division at once look into the matter of the charge for French telephone sets, because the profit of $24,000,000 made by the telephone company in the Nation last year indicates that the charge for these instruments is altogether too high.

"I also recommend that the division prepare at once to determine the actual value of all public utility properties for the purpose of establishing a fair rate base, and for the purpose of assuring the public an absolute square deal in the future. At the same time I believe the subject of holding companies should be examined, because in general, holding companies do not operate to promote the public interest."

Gasoline Price

"I ALSO recommend that the public utility division be given authority to fix the price of gasoline. This will prevent unfair and unnecessary price increases by agreement of the large companies. In my opinion these companies have unjustly taken millions of dollars out of the pockets of the Rhode Island public, and will continue to do so unless the power to regulate the price is given to the division."

Governor Philip F. La Follette of Wisconsin

Progressive Action

"WHEN America constructed the great Boulder dam across the Colorado river, we harnessed vast quantities of new power.

"Millions of tons of water are backed up behind its towering walls. That power is there, harnessed, waiting for use. We cannot neglect it, or deny it expression. If we did, then sooner or later the constant and never-ending pressure of that terrific force would break through, and unleash an avalanche of disaster upon all in its path.

"The great resources of power which our modern world has released must and will find expression. We can use them, if we have determination and vision, to build greater happiness and security for all. But if we fail to master them, they will master us. We no longer live in a world where doing nothing is cautious or conservative. On the contrary, that is the one course that spells certain disaster.

"If we are true to our traditions, and understand that circumstances under which we live, we will not only examine into basic causes; we will ACT. Action without knowledge may be blind, but knowledge without action is futile. In acting we may make mistakes, but, situated as we are, NOT to act is the greatest mistake of all. By doing nothing we not only lose any chance of solving our problems, but we thereby expose our most precious institutions and ideals to certain attack."

Governor Roy E. Ayers of Montana

Unnecessary State Employees

"BY way of illustration of this point, I direct your attention to the alarming increase in the number of people employed in the regularly established departments, boards, and commissions of our state government during the past four years, and the cost of maintaining these additional positions. I recognize that extraordinary conditions have called for extraordinary expenditures; but disregarding these factors, there remain additions to personnel and payrolls, which, in my judgment, are not required for the efficient operation of our governmental affairs. In this connection, permit me to remind you of the fact which has doubtless often occurred to all of the members of this assembly, that while it is easy to create new boards and commissions and add to the duties and expenses of those already established, it is a matter of the utmost difficulty to abolish or reduce the size and cost of one of these public bodies. For this reason, I would very respectfully request that constant vigilance be exercised against the creation of new functions or functionaries of the state government."

Water Conservation

"RECENT years of disastrous drouth which have caused enormous losses to our people and tragically retarded the normal progress of the state, have brought home to all of us the necessity of taking every possible measure to remove or reduce the hazards of the elements and place an ever-increasing

number of our citizens beyond the influence of these recurring misfortunes. Sufficient water annually flows out of our mountains and runs unused to the seas, if captured, restrained, and distributed in proper season, to transform vast areas of Montana into the richest and most productive agricultural region on earth.

"I favor carrying forward a program of water conservation which will gradually bring to pass this desired change. So imperative is the need, so numerous the opportunities, and so meager our financial resources capable of being diverted to this work that every dollar should be spent with the greatest care and made to produce the largest possible benefit. Within the limits of my authority as chief executive, I pledge my sincere endeavor to guard against wasteful or unwise expenditures in the administration of our water conservation commission and my insistence upon the actual construction of projects now or hereafter found feasible."

Utility Taxation

"WE still have on the statute books tax classification laws, which put the great industrial foundations of many of our public utility concerns in the column with the homes of our people. In the first instance, the property has an earning capacity and is earning every day in the year, while the property in the second instance is without earning capacity. The machinery employed to develop the power and energy of these great public utility concerns is classified in the same 'value column' with farm machinery. The former has an all-year earning capacity and is earning every day in the year, while the latter has only a seasonal earning capacity of approximately thirty days of the year. . . .

"It is the theory of classification law for taxation purposes, that property should be classified on the basis of earning capacity and that in legislating upon this subject the use to which property is put should be the basis of legislative consideration. Our own supreme court has laid down that rule; hence the great industrial dams holding back the waters of our streams for the generating of electric energy, should not be classified as farms or homes, and neither should the substations and transformers of these large industrial institutions be classified as farm machinery. Such classification destroys the intent and purpose of the taxation law which is and has been interpreted to mean that property should be taxed according to the use to which it is put and its actual earning capacity. These inequalities should be corrected and I trust will be corrected by this legislative assembly. In making these corrections, I charge you with keeping uppermost in your minds the fact that use and earning capacity establish 'ability to pay.'"

Gasoline as Utility

"TO deter unfair discrimination in Montana, as compared to other states, I urge your serious consideration of legislation making gasoline a public utility."

Governor Elmer Benson of Minnesota

Aid to Coöperatives

"THE state should facilitate the development of coöperative enterprises of every description. The coöperative and public ownership enterprises of Sweden and other Scandinavian countries were largely responsible for the fact that the depression was felt there less than in those countries where business was confined almost entirely to individualistic enterprises. You should be liberal in appropriations to the Department of Agriculture in its activities relating to coöperatives.

"I recommend a change in the coöperative law in order to permit coöperatives a greater latitude in the purchase of stock in other corporations. The change suggested, I believe, will materially aid their development and expansion."

Electric Power

"CHEAP electric power is one of the essentials of our modern civilization.

"Approximately 85 per cent of the farms in Minnesota are without electric service. Many of the farms which have electric power are paying exorbitant rates. Electric rates in Minnesota differ in nearly every community. A recent survey by the Federal Trade Commission showed rates varying all the way from 2 cents to 13½ cents per kilowatt hour.

"Long experience has shown that regulation by state commissions will not bring the desired results. Endless litigation and prohibitive expense make it impossible for the state to procure any real reduction in rates through the courts.

"In view of the unprecedented activity of the Federal government in the field of rural electrification, the state of Minnesota should take an active interest in power problems.

"During the next ten years 410 million dollars in Federal funds will be available for rural electrification purposes. It seems obvious that we should be in a position to make the most of this aid.

"The Minnesota Planning Board has made a study of the power question and has recommended a state advisory power commission. The purposes of this commission would be to survey existing power plants, rates, and services; to prepare a comprehensive plan for

the economic interconnection of existing sources of electricity in the state; to prepare a statewide plan for rural electrification; and to furnish information and recommendations pertaining to electric service.

"A commission of this kind would be able to uncover the facts which are so sadly lacking today and would pave the way for a greater enjoyment of the benefits of electric power for the citizens of this state. I recommend an act creating such a commission supplied with sufficient funds to carry on its work.

"I further urge the removal of restrictive legislation hampering the normal development of the facilities of municipal power plants. There are in Minnesota 50 cities owning their own generating plants. Eighty cities and towns own power distributing plants, and 5 counties have established electric power coöperatives.

"The removal of restrictive legislation, such as the present law which prevents municipal power plants from extending their lines more than 30 miles from the boundaries of the municipality, would permit these cities and towns to band together into municipal leagues for large-scale operation and it would also permit them to unite with rural coöperative power associations wherever this appears feasible.

"I urge the submission to the voters of a constitutional amendment which would enable the state to produce electrical power and sell this power to municipalities at their gates for their own retailing and distribution."

Governor Clyde Roark Hoey of North Carolina

Governmental Spending

"THERE is a disposition in some quarters to measure governmental service by the amount of money expended. That is not an absolutely accurate standard and should not be accepted as the only criterion. We can see it frequently stated that North Carolina expends less per child for education than other states. You cannot measure the educational opportunity provided for children by merely giving the figures representing the amount of money spent for education. Extravagant and unwise and, in many instances, unnecessary expenditures are made in many states in connection with the educational system—the very nature of the work invites extravagant and impractical spending. There are so many things for which money may be spent, but much fewer things for which it must be spent in order to meet the absolute needs in both education and government. It should be remembered that economy in government is still a virtue and the most destructive force in government or education is unbridled extravagance. The state ought not to deal penuriously with its citizenship and it must make substantial progress and go forward sanely, but it must not forget that there is no virtue in spending unless a hundred cents in value is obtained for every dollar expended and unless the investment is necessary in order to serve the needs of the people of the state.

"It can be said truthfully that North Carolina has maintained its government upon a basis of strict economy and unquestioned integrity, and yet it is revealing to note the increase in expenditures since the beginning of this century. During the first year of Governor Aycock's administration, thirty-five years ago, the total expenditures by the state for all purposes were a million and a quarter dollars. Last year the expenditures of the state reached the high total of $60,646,422. Naturally the tremendous increase arises because of the support of schools and roads by the state. In 1901 the state contributed $200,000 to the public school system and now it pays $21,000,000. Then no appropriation was made for roads and now all the roads are built and maintained by the state. All institutions have been enlarged and increased, others established in new fields of service, new state agencies have been created and others broadened and extended, and the state has preempted many fields of activity formerly belonging to the counties."

State Responsibility

"THERE has been an unmistakable trend toward state control and state responsibility during a period of years, but the change in the last seven years has been most striking. As an evidence of the shifting of the burden of government as between the state and counties, and municipalities, it is interesting to note that in 1931 the total revenues raised and expended by the state amounted to $36,776,964, while the counties, municipalities, and special districts expended $65,354,302. Last year the state expended $60,646,422, and the counties, municipalities, and special districts had their tax burden reduced to $35,571,031. Of this sum $21,000,000 was for debt service, which is a diminishing obligation. The counties have been relieved of everything except the obligation to provide for the poor, conduct their courts, coöperate with the state and Federal government in public health, welfare, and demonstration work and provide for debt service. The state has remitted to the counties and municipal governments the exclusive right to levy ad valorem taxes on property during the last quadrennium."

Bismark Tribune

BREAKING UP THE JAM ALONG THE POTOMAC

Governor Frank Murphy of Michigan

Security Law Criticized

"THE present state law governing the sale of securities has not operated with entire satisfaction. A state law modeled on the Federal Securities Act and based on the theory of disclosure would tend to bring about a desirable degree of uniformity in security regulation and secure for Michigan some of the advantages that have been provided by the Federal act. The desirability of such a measure is being examined."

WHAT THE STATE GOVERNORS ARE TALKING ABOUT

Governor Wilbur Lucius Cross of Connecticut

Federal Aid

"IN anticipation of an adequate construction program to meet the exigencies of the situation, I trust that you will enact early in the session legislation which will permit Connecticut to avail itself of its share in such funds as may be allocated to the states for building and other purposes by the Federal government through its various agencies."

Governor R. L. Cochran of Nebraska

Commission Reform

"I JOIN with the chairman of the state railway commission in recommending a constitutional amendment by which the railway commissioners will be appointed by the governor with the consent and approval of two-thirds of the legislature. For these positions special knowledge and qualifications are required which, it is believed, can best be secured by appointment. Confirmation by the legislature gives the whole people of the state a part through their representatives in the selection of the members of the commission. Under such provision, two-thirds of such members which, in effect, represent two-thirds of the population of the state, must give their concurrence."

Governor Lewis O. Barrows of Maine

Interstate Toll Bridges

"YOU will be requested shortly to consider a compact with the state of New Hampshire to create an interstate bridge authority for the proposed Portsmouth-Kittery bridge, designed to relieve traffic conditions in the former city.

"It is my understanding that no appropriation is required of either state, as it is proposed to construct this bridge from Federal funds and from bonds issued by the bridge authority to be paid for in tolls from the Boston and Maine Railroad and trucks which will be routed over it in Portsmouth.

"The present bridge will remain for passenger vehicles. Further advice is to the effect that the legislature of New Hampshire has already approved this act, but it will not become operative unless jointly approved by the state of Maine."

Governor Harry W. Nice of Maryland

Public Service Commission

"THE public service commission under former Senator O. E. Weller 'has been reorganized on a more efficient basis.' Among its 'more outstanding' achievements during the last two years have been the development of a method of securing rate reductions by utilities by conference. Reductions by the Chesapeake and Potomac Telephone Company of $858,000 per year, by the Consolidated Gas Electric Light and Power Company of $813,000 per annum, and other reduced charges for public service amounting to $1,800,000 a year were cited."

Governor Lloyd C. Stark of Missouri

Economy in Government

"A BUSINESS administration means absolute honesty in every branch of our state government. It means the elimination of waste and needless expenditure of money in all departments. The ideal public servant is one who serves from patriotic motives, for the benefit of his state and not for mere mercenary gain; one who spends public money as carefully as he spends his own funds. The state of Missouri demands public service of this character and I shall insist upon having it from all of those whom I appoint to office."

Governor E. D. Rivers of Georgia

Against Lobbying

"PARAGRAPH 5 of § 2 of Art. I of our Constitution that I have just sworn to preserve, protect, and defend, declares lobbying to be a crime. . . .

"The poor people of Georgia cannot maintain a lobbyist; the homeowners cannot maintain lobbyists at the capitol; the blind, the crippled, the mothers, the insane, the tubercular, the feeble-minded, the school children cannot maintain them, and since they cannot, by the Eternal Gods, those who seek to avoid paying their just share of the costs of good government shall not maintain them.

"Private corporations are given their existence by the state and hold their charters at the sufferance of the state. There is no reason in equity or logic why they should insist on dictating to the state what benefits and governmental services it shall give to the individual citizens of the state. Themselves being beneficiaries by special franchise, should they not be willing, and if not willing, should they not be forced to be content to run their own affairs and not interfere with the state, through whose sufferance they exist?"

Governor Carl E. Bailey of Arkansas

Rural Electrification Program

"IT is likely, also, that no seriously debatable legislation will be required of us to secure for the rural residents of Arkansas the benefits of rural electrification. It is pitiable that recently it has been said that Arkansas farmers are so poor they could not afford electricity even if it were available to them. It is my belief that electric current is fast moving into the realm of necessities. It should be available, therefore, to 200,000 farms in Arkansas to which now it is not available, and the rate placed in reach of the farmer so that he may use it to improve the economic and social position of himself and his household.

"If the state utilities commission has not the authority or facilities to effectuate the commencement of an effective rural electrification program in coöperation with the national Rural Electrification Administration, this assembly should not miss the opportunity to supply such deficiencies."

Governor M. Clifford Townsend of Indiana

The Indiana Commission

"OUR public service commission law was revamped early in 1933, reducing the membership of the commission from five to three, and establishing the office of public counsellor for the service of persons and municipal corporations having grievances against the public utility companies. The change has been worth more than $20,000,000 to utility ratepayers of Indiana, and has restored order and regulation over the bus and truck industries. The commission has no problem confronting it which is not an administrative problem. I would recommend, however, that it be adequately financed for the purpose of conducting necessary investigations."

Governor Olin D. Johnston of South Carolina

Federal Coöperation

"IT has been the policy of this administration to coöperate fully with President Roosevelt in his efforts to alleviate suffering and improve business conditions. Numerous Federal projects over the state, employing a large number of men who would otherwise be idle, have resulted from this fine relationship between officials of the state government and those in national affairs.

"The farmers of the state have benefited greatly from the Federal and state coöperation on matters of rural electrification and other broad principles of the New Deal. With the tax exemption law on homes and small farms effective, I feel the farmer will be in position to enjoy a higher standard of living."

The March of Events

Register under Act

THE American Water Works & Electric Company and the North American Company on February 9th announced that they would both register with the Securities and Exchange Commission under the Public Utility Holding Company Act of 1935. At the same time it was announced that the suits filed to test the constitutionality of the act, which were pending in Washington, had been withdrawn.

The decision by these two companies to register was the first break in the utility opposition to the bill since Judge Mack, on January 29th, ruled in effect that Electric Bond & Share must register.

Chairman James M. Landis of the SEC said he believed the action of the two companies would be followed by the rest of the industry, and made public a letter he had sent to James F. Fogarty, president of the North American Company, praising the action. Chairman Landis said 69 holding companies had registered under the Holding Company Act. They represent 26 per cent of the assets of the industry, is was said.

Wants More TVA's

SENATOR NORRIS, of Nebraska, author of the Tennessee Valley Act, last month proposed the creation of "enough TVA's to cover the entire country." This ambitious program was suggested by the veteran Nebraska Senator as the best way to handle the flood control problem now confronting the nation.

Despite his impatience with court actions now holding up the TVA, Norris said:

"In my judgment, what the country needs is enough TVA's to cover it. That would mean the maximum navigation development, the maximum flood control, the maximum reforestation, the maximum correction of soil erosion, and the maximum amount of power."

In past sessions of Congress Norris has proposed extension of the TVA experiment to the great Missouri and Mississippi river valleys; but no substantial progress was made on them.

Urges PWA Supreme Court

A. F. BUECHLER, newspaper editor and president of the Nebraska Irrigation Association, last month suggested that a supreme court of engineers be created to assist PWA Administrator Harold L. Ickes in deciding on the merits of public works projects. He urged that such a court be formed if the name of the United States Department of Interior be changed to Department of Conservation.

The court would consist of five or seven engineers, at least 45 years old, to be appointed for long terms and not subject to removal for political reasons, he said. The court, under his plan, would determine whether a proposed project were feasible from an engineering and economic standpoint before it could be approved by the Department of Conservation.

Arranges New Contract

THE Ontario Hydro Electric Power Commission announced last month that a new contract had been arranged with the Ottawa Valley Power Company to replace the contract repudiated by provincial government action. The suit brought by the Ottawa Valley Power Company to test the validity of Ontario's power contract repudiation would be dropped, it was said.

The new contract, which runs for thirty-four years, provided for the immediate purchase by the Ontario commission of the 96,000 horsepower station, which was taken under the original agreement, but at a price of $12.50 per horsepower instead of $15. The new clause, however, imposed on the commission the entire cost of the transformer station at Chats Falls, making actual cost per horsepower approximately $13.50.

According to T. Stewart Lyon, chairman of the Ontario commission, the average annual saving to the commission over the old contract would be $150,000. Under the new agreement the commission also was given an option to purchase the capital stock of the Ottawa Valley Power Company within the next three years for $5,000,000.

Attacks Papers-Radio Link

SENATOR Burton K. Wheeler, chairman of the Senate Interstate Commerce Committee, stated last month that he would introduce a bill to bar newspapers from owning radio broadcasting stations. He said the purpose was to prevent monopoly of the channels of public information.

The Montana Senator also revealed data, furnished by the Federal Communications Commission, showing that 150 stations are now owned or controlled by newspaper interests. Of these stations, the data showed that 52 were acquired by the newspaper interests in the past year, and more than 100 applications were pending for licenses from persons affiliated with newspapers.

Senator Wheeler also made public an opinion written by Hampson Gary, FCC general

counsel, that legislation of the kind proposed by the Senator "should meet the constitutional requirements." The Senator had asked the commission for an opinion on the constitutionality of legislation "denying the right of newspapers to obtain broadcasting licenses in the future and requiring them to divest themselves of existing rights in broadcast stations within a reasonable time."

Senator Wheeler also asked the commission whether it had authority at the present time to deny applications from newspapers for stations on the ground of "public policy." Mr. Gary held there was no such authority but that the commission was empowered to consider the business connection of applicants in deciding whether a license would serve "public interest, convenience, or necessity."

Alabama

Studies Long-Distance Rates

AN investigation into the long-distance telephone rates charged on service within the state has been instituted by the state public service commission. In an order issued February 5th, the commission announced it had been conducting a preliminary investigation of these rates and had found sufficient cause to make a formal probe. Accordingly, the hearing has been set for March 9th, at the commission offices in Montgomery, with telephone companies being notified to appear.

Last year telephone subscriber rates were reduced by the commission approximately $250,000 and recently the commission ordered a reduction on charges for handsets approximating $52,000. In 1935 a general rate reduction of $190,000 was put into effect.

The 1935 session of the legislature increased the telephone companies' gross receipts tax from 2½ per cent, the rate paid by all other public utility companies, to 4 per cent. The legislation was designed as a big stick to force the company into a compromise on rates. Governor Graves early last month signed a bill restoring the rate to 2½ per cent, thus saving the telephone company approximately $80,000 a year.

Offers Power Plant

THE Alabama Power Company on February 9th sought authority to sell its urban electric distribution system in Tuscumbia to that city, in a petition filed with the state public service commission. Hearing was set for March 12th. The proposed sale price was not referred to in the formal petition.

Tuscumbia plans to operate its own municipal electric system, purchasing current from the TVA. In its petition, the Alabama Power Company said its Tuscumbia franchise expired October 17, 1931, and that the company had been unable to secure a renewal or extension.

Arizona

Debate Power Authority

CREATION of an Arizona Power Authority to make arrangements for use of Boulder dam hydroelectric energy was debated pro and con before several legislators at Phoenix last month by representatives of the Boulder Dam Power Transmission Association and the Salt River Valley Water Users' Association.

The 13th legislature has before it—in each house—bills that would create the power authority and appropriate $85,000 for maintenance of the unit. The hearing on the measure was conducted by the House and Senate appropriations committee.

Albert Stetson, secretary of the Boulder group, led the fight in favor of the authority. He was joined by fourteen other speakers. Lin B. Orme, president of the Water Users' Association and H. J. Lawson, chief engineer for that association, debated against the Boulder dam proposition. They were supported by three other spokesmen.

While officials of the Water Users' Association termed the Boulder proposition a "wild dream," advocates declared that it would bring power to Arizonans who haven't it and would give economical power to those who have it. Stetson led the parade of speakers. He said the $85,000 would be used for salaries of three commissioners on the authority at $5,000 a year each; $10,000 for travel expenses, and the remainder for necessary surveys.

The power would be brought into Arizona through sale of revenue bonds sold to the Federal government. Stetson quoted engineering authorities that Boulder dam power serviced 200 miles away could be sold at between 3.5 to 5 mills per kilowatt hour. He added that "power developed on the Verde would compete with Boulder in Phoenix at 4.5 mills."

Mr. Stetson also explained the power authority would be prohibited by law from ratifying the Colorado river compact. Other speakers asserted that credit of Arizona would not be pledged in the Boulder movement.

Arkansas

Hits Service Charge

THE House of Representatives on February 10th voted 62 to 29 to prohibit utility companies from making service charges. The bill was sponsored by Representative Coffelt of Saline.

Representative Blair of Logan opposed the measure on the ground that the utilities have done "a great deal" for Arkansas, that they are taxed heavily, and that they give employment to thousands of persons. He said also that farmers favor allowing the utilities to make a fair profit so that they may extend services to the rural districts. He recalled also that the state department of public utilities last year reduced the earnings of the Arkansas Power and Light Company about $180,000 and those of the Arkansas-Louisiana Gas Company about $150,000, saving consumers $330,000 a year.

He objected to the bill also because service charges of municipally owned companies would be eliminated, whereas some of them borrowed Federal funds and they would be unable to repay the loans without the service charges.

Representative Cunningham of Hot Spring county spoke for the bill, declaring that he had rather pay a higher rate for his utility service than to have to pay a service charge. Representative Houston of Cleburne said he could see no sense in a consumer having to pay for something he doesn't get, and urged passage of the bill.

Representative Campbell of Garland, opposing the bill, declared that the place to get relief was the department of public utilities.

California

Central Valley Project Urged

THE National Resources Committee on February 3rd recommended completion of the $170,000,000 Central valleys project in California as soon as practicable. Recommending projects for a 6-year public works program, the committee described the huge flood control and power plan as the outstanding incomplete project, overshadowing all others, in the California drainage district. The committee declared that completion of the project as soon as practicable "is of prime importance."

The project calls for dams on the Sacramento and San Joaquin rivers which would create lakes furnishing pressure for operation of hydroelectric plants, as well as curbing flood menaces. The committee report to Congress stated:

"The outlook for this large area, with its fast-growing population of more than 6,000,000, depends chiefly upon the supply of water that can be made regularly available for essential purposes."

Georgia

Surveys Power Market

BY direction of the President, the Federal Power Commission announced last month it would proceed promptly to make a survey of the market for power of the proposed Clark Hill project, on the Savannah river, about 25 miles above Augusta.

A study was made of this project last year, by direction of the President, by a special board of engineers composed of Colonel Earl I. Brown, Corps of Engineers, U. S. Army, chairman; Sherman M. Woodward, consultant, National Resources Committee, and Roger B. McWhorter, chief engineer, Federal Power Commission. This board made its report, recommending that the project be constructed "as soon as practicable" for the benefit of navigation, development of hydroelectric power, and the relief of unemployment. The estimated cost was $21,244,000. This report was submitted to the President on March 16, 1936, without review or comment by Secretary Dern, Secretary Ickes, or Chairman McNinch.

The Water Resources Committee of the National Resources Board included the Clark Hill project in its list of projects recommended for construction, as one to be further surveyed with reference to markets for power.

Bus Rate Extended

The Columbus city commission last month granted an extension of six months of the trial period for a 5-cent bus fare upon application of the Columbus Transportation Company. Increased patronage during the first six months' trial of the new fare, reduced from seven cents, prompted the extension.

Illinois

Tax Held Illegal

THE state supreme court last month held the 3 per cent state utilities sales tax unconstitutional because it exempted sales of gas, water, and electricity for industrial use. The case was brought by the city of Chicago and other municipalities owning and operating utilities, but the ruling applies to privately owned utilities also.

Belief prevailed in some quarters that an effort would be made to enact a new bill taxing sales of gas, water, and electricity for industrial use also. Meanwhile, it was said, utilities would save the amount of this tax. The 1937 savings apparently will extend from January 1st to such date as a new law is passed. A two-thirds vote in each house would be required to make such an act effective before July 1st, next.

The 3 per cent tax became effective July 1, 1935, and was to have been reduced to 2 per cent January 1, 1937. Reduction, however, was postponed to May 1, 1937, by the legislature.

With the exception of the Illinois Bell Telephone Company, which paid its 3 per cent utility tax under protest, little hope was entertained that the large utilities in the Chicago area would be able to recover taxes paid in 1935 and 1936. Illinois Bell paid about $1,000,000 in 1935 and $2,070,453 in 1936. Commonwealth Edison paid $2,311,386 under this law.

Indiana

Amendment Introduced

A BILL, sponsored by Representatives Ferguson and Fayette, was introduced in the state legislature on February 8th which would amend the public service commission law to empower any municipality after affirmative referendum vote, and on majority vote by the city council, to acquire or construct and operate a public utility throughout a 6-mile radius without a certificate of convenience and necessity from the state public service commission or any other public body.

The bill would also give to privately owned utilities providing like service in the same locality, the right of appeal from council action in circuit or superior court, decision of which may be appealed to the supreme court. It would also require courts to submit written opinions on such cases.

Iowa

Votes Utility Bill

THE state Senate on February 10th had its first skirmish of the session over municipal ownership of public utilities under the Simmer law. The law permits cities to buy public utility plants and issue bonds to be retired out of the earnings. The law frequently has been attacked as permitting sale of plants on a doubtful chance that they may pay out, and defended as frequently as a step forward in municipal ownership and operation.

The recent Senate action was taken on a bill by Roy S. Stevens, of Ottumwa, to permit refunding of bonds by cities in such cases. Stating it was his intention to permit the cities merely to issue new bonds for old and take advantage of present lower interest rates, Stevens offered an amendment to his own bill which would prevent a change in the maturity date of the securities or an increase in the amount during the refunding.

The amendment provoked a lively battle with those wishing to give the cities an extension of time to pay off bonds if it is wished. The amendment was voted, 23 to 24. Leaders opposing the amendment then sought to defeat the bill temporarily to give them another chance to remove the amendment. They failed and the bill passed, 27 to 17.

In the House on the same day, Representative Strickler offered a bill to allow cities and towns and contract or purchase municipal telephone systems, and to operate such systems and fix the rates that may be charged for such service. Cities and towns do not have such power under present law.

Pushes Rural Program

THE Rural Electrification Administration last month reported that Iowa has taken the fullest advantage of its program to supply light and power to farms. A summary showed that on February 11th the state's entire $1,783,086 allocation for the period ending June 30, 1937, had been apportioned among projects in various stages of development over the state.

The projects completed or under construction involved a total expenditure of $746,116, providing for 711 miles of electric lines.

Louisiana

To Expand Rural Service

A TOTAL allotment of $1,120,000 for rural electric line construction extending into 15 of the state's 64 parishes was announced by the Rural Electrification Administration at Washington early last month. Over 4,600 rural customers will receive service for the first time over the new lines, it was stated. The latest estimates, compiled at the close of 1936, gave Louisiana a total of 3,990 electrified farms.

Four newly formed electric distribution coöperatives will divide the new allotment. These coöperatives were developed through local leaders and agricultural agents with the assistance and coöperation of trained REA field representatives. The projects are as follows:

The St. Mary-Iberia Electric Coöperative of Franklin received $95,000. The proposed system to be erected with these funds will include some 104 miles of line to serve 343 customers. The probable source of power is the city of Franklin.

A coöperative being formed in Grant and neighboring parishes will receive $500,000 to build 547 miles of lines to serve about 2,129 customers in Grant, Rapides, and Natchitoches parishes. Short extensions will also go into four other parishes. The city of Alexandria will probably furnish power at a wholesale rate averaging 1.06 cents per kilowatt hour. This project will be built largely in the Red river valley.

A newly organized coöperative for Terrebonne and Lafourche parishes received $105,000 to build a proposed system of 113 miles to serve nearly 400 customers. Power will probably be purchased at wholesale from the Houma municipal plant. At the present time fewer than one farm in 100 are electrified in this area.

An allotment of $420,000 was made for a coöperative project in Lafayette, St. Martin, Acadia, and St. Landry parishes in the deep southern section of the fertile Mississippi river valley region. The proposed system will include 456 miles of lines to serve 1,750 customers.

Massachusetts

Free Bulb Bill Loses

FIVE separate bills for free bulbs were before the House early last month, but after the test roll call vote the lower branch accepted the recommendations of its committee on power and light in reporting leave to withdraw on all five. Debate came on the free bulb bill introduced by Representative Thomas E. Barry of East Boston, who asked the House to overrule the committee report and accept his bill. He sharply criticised the power and light committee, claiming that it had voted against the measure twenty minutes after completing its public hearing on the bills.

Representative Jackson J. Holtz of Dorchester said the purpose of the bills was to provide a short-cut rate reduction, and that unless the utility companies want to advance the day of public ownership and municipal operation "they should adopt the long range policy of giving their customers a fair deal by accepting this bill."

Bills were also filed by Representatives Timothy Murphy of Dorchester, Abraham Zimon of Roxbury, and John J. Donahue of Somerville. Urging defeat of the free bulb bills, Representative John Comerford of Brookline contended that there was just as much reason "to give free refrigerators, washers, irons and other electrical equipment as giving free bulbs." He said that if the free bulb law were passed, it would mean an increase in the electric rates, and declared that the measures were "something for nothing" bills.

When Representative Barry appealed to the House to substitute his bill for the adverse report of the committee, it was refused by a rising vote of 86 to 82. Then he asked and obtained a second roll call vote. In what was said to be the first real test of the session, the House by a vote of 109 to 103 refused to approve the bill.

The Senate subsequently killed the bills by a vote of 19 to 10. An appeal to the Senate to override the adverse report of the power and light committee was made by Senator Edward C. Carroll of South Boston, but the Senate refused to take this action.

Commission Bill Killed

LIEUTENANT-Governor Francis E. Kelly's bill for the election of members of the state regulatory commission by popular vote was placed at the bottom of the calendar by the Republican majority in the state House. The bill had been filed by Representative Timothy J. Murphy of Dorchester at the request of the Lieutenant Governor. A similar bill by Representative J. B. Wenzler of South Boston was given more favorable position but both the Wenzler and Kelly bills were killed so that future members of the state utilities commission will continue to be appointed by the governor of the commonwealth with the consent of the Executive Council.

Mississippi

Handset Phone Charge Reduced

THE state railroad commission on February 3rd announced that the Southern Bell Telephone & Telegraph Company had voluntarily submitted a second reduction within the past six months on handset telephone "extra" charges. The reduction was accepted.

The order provides that the company make no extra charge on the handset type telephone after a period of twenty-four months to new customers and no extra charge to present handset customers who have paid as much as $3.60 on their extra service. The handset rate is 15 cents a month, the rate having been recently reduced from 25 cents to 15 cents.

Montana

Utility Measure Killed

AMONG the measures recently consigned to oblivion was a Senate bill which would have required public utilities to file identical annual statements for taxation and rate-making purposes. With a roll call vote demanded and a call of the Senate ordered, a minority report of the taxation committee that the bill be killed was adopted 30 to 24.

Previously, however, a motion to print the measure and place it on general file lost 30 to 22. It then was moved to have it reconsidered, but a motion to lay the reconsideration motion on the table was carried and the bill was definitely killed.

Nebraska

New Utility Bills Introduced

THREE bills were introduced in the state legislature last month by Senator Slepicka at the request of the state railway commission. The first measure would give specific control to that body of the regulation of rates and services of gas and electric utilities, and would exempt municipalities from provisions of law, except those relating to uniform system of accounts, filing of rates and reports. It would also authorize the levy of a tax up to two-tenths of one per cent of gross revenues permanently appropriated for use in enforcing the act.

The second bill, an emergency measure, would confer specific jurisdiction upon the state commission over rates and service of motor carriers in intrastate commerce on state highways and would fix an annual fee of $5, proceeds to be used in enforcement.

The third would give specific authority to regulate rates and service of telephone companies, and would authorize the levy of tax up to two-tenths of one per cent of gross revenues, to be permanently appropriated for use in enforcing the act.

County Gets Power Loan

BURT County (Nebraska) Rural Power Company directors signed a government loan contract on February 9th to borrow $275,000 for a rural electrification project covering 263 miles of transmission lines in the county.

E. D. Beck of Decatur, president, said 653 farmers have agreed to buy power. He predicted actual construction would start within about forty-five days. Electricity would be obtained from the Elkhorn valley power plant at Scribner.

New Jersey

Utilities Cut Rates

TWO electric rate reductions, after negotiations with officials of the companies, were announced on February 12th by the state public utilities commission. They were $180,000 by the Jersey Central Power & Light Company, effective April 1st, and $174,040 by the New Jersey Power & Light Company, the latter becoming effective as of March 1st.

The Jersey Central Power Company serves the Monmouth county shore area and the eastern southern section of the state, with some northern territory in Morris and Essex counties. The New Jersey Power operates in the northwestern part of the state.

These cuts, added to the $1,500,000 reduction in electric rates by the Public Service

Electric & Gas Company effective January 1st, carried the total of electric rate reductions this year in the state to $1,854,040.

At least 65 per cent of the Jersey Central reduction was in residential rates. Under the revised schedule of the New Jersey Power & Light, no change was made in the base rate of $1 for the first 11 kilowatt hours. The new schedule provided a rate of 7 cents per kilowatt hour for the next 25 kilowatt hours; 5 cents per kilowatt hour for the next 64; 3 cents in next 100 block, and thereafter 2 cents.

New York

Commission Calls Critic

INCENSED at the accusation that New York's electric rates are excessive, the state public service commission recently wired Frank R. McNinch, chairman of the Federal Power Commission, and invited him to present legal proof to sustain his charges. The message, signed by Milo R. Maltbie, chairman of the state commission, was approved by all the members.

Replying to the telegram, Chairman McNinch, in a letter made public February 13th, reaffirmed his remarks made at a House committee hearing on December 10th, regarding electric rates in New York, and pointed out that, even with the $7,000,000 reduction made since that time, Mr. Maltbie himself admitted that certain rate schedules were still "out of line." Chairman McNinch wrote in part as follows:

"Your telegram expresses a willingness on your part to have me appear before your commission to testify. It is thought that, after you have read the transcript of my testimony before the committee and learned that all of my statements were temperate and wholly free from either criticism of or discourteous reference to you and your commission, you may conclude that my appearance is not required and that such a procedure might be unseemly.

"However, if it is your considered desire to have me appear, I will do so, with the understanding that you assume sole responsibility for such an extraordinary procedure. Only on this basis would I respond to your invitation. In doing so I would want an agreement that the hearing be open to the press and public and that, after you had examined me as freely as you may care to, I would be extended the reciprocal courtesy of examining you, your associate commissioners and such members of your staff as I might deem advisable . . ."

Following Chairman McNinch's telegram, Chairman Maltbie issued a reply expressing willingness to hold public hearings for the presentation of any "legal proof" which the Federal official might offer. The New York official disapproved, however, what he termed the "novel" and "unprecedented" suggestion that members and staff of the New York commission should be examined by the Federal authorities. Chairman Maltbie pointed out that all hearings are held in public.

Bill Bars City-Owned Plant

MAYOR LaGuardia's proposal for a municipal power plant to compete with private companies already in the field and serve as a "yardstick" on their rates and service to consumers would go on the scrap heap if a bill introduced on February 2nd by Assemblyman Phelps Phelps, Democratic member of the Assembly from New York city, should become law.

The Phelps bill provides for "electrical block plants" under private management which could generate, sell, and distribute steam and electric light and power to consumers within the block in which they were established. The measure provides for regulation of this proposed traffic by two commissions, one for New York city and another for the rest of the state. The commissions would have authority parallelling in general the powers now vested in the state public service commission and the transit commission operating in New York city, except that only steam and electric lighting would come within the purview of the new regulatory bodies. Each commission would be composed of five members, with the commissioners drawing a salary of $15,000 a year each.

Because certain provisions of the bill run sharply counter to amendments to the state public service law, advocated by Governor Lehman, under which municipalities would not only, with the approval of the public service commission, be authorized to develop and distribute power within their own boundaries, but could sell their surplus current to other localities, it was regarded as highly improbable that the bill, should it pass the Senate and Assembly, would receive the approval of the governor and become law.

Handset Fee Ends

THE state public service commission recently ordered the New York Telephone Company to eliminate the extra monthly charge for handset telephones on April 1st for all subscribers who have paid the charge for two years. Milo R. Maltbie, chairman of the commission, announced that as rapidly thereafter as a subscriber reached the end of a two-year period, the additional charge would cease, and that at the end of this year the period would be reduced to eighteen months, so that after January 1, 1938, all subscribers

who had paid the charge for a year and a half would be relieved of further monthly payments.

The immediate saving to subscribers by this order will be about $830,000 a year, and when the period is reduced to eighteen months the annual saving will approximate $1,150,000. When the plan goes into effect April 1st about 660,000 handsets, or about 45 per cent of those now in use, will become free of extra monthly charges.

The telephone company announced it would put the commission's order into effect on the date named. It was estimated that the order, with the more general reductions effected last August, will reduce charges billed to subscribers by more than $5,000,000 annually.

Scores Transit Plan

OPPOSITION to rapid transit unification in New York city under public ownership and operation was voiced recently by the New York Board of Trade at a transit commission hearing on the $436,000,000 unification plan proposed by Samuel Seabury and City Chamberlain A. A. Berle, Jr.

A statement containing the board's views was read by M. D. Griffith, executive vice president. It declared that the organization was withholding its approval of the Seabury-Berle plan, but "without prejudice." No approval could be given, the statement said, until more light was shed on such important matters as the rate of fare under unification, the effect of changing relationships between employers and labor, and the effect of the plan upon the city's ability to extend and improve transit facilities.

The statement reiterated the board's long-standing contention that "a rate of fare should be established which would yield a return sufficient to cover maintenance, operation costs, yield a fair return on invested capital, and ultimately amortize the outstanding securities."

The board protested, in view of present tendencies in employer-labor relations, against the trend for government entry into business, it was said.

North Carolina

REA Investigation Bill

A BILL of statewide import was introduced in the Senate last month by Senator L. M. Abernathy of Caldwell, which would authorize an investigation of the activities of the state Rural Electrification Authority. Dudley Bagley, a former state Senator, is chairman of that organization. The bill was referred to the committee on public utilities.

The measure provided for the abolition of an exemption which has been granted power companies that they not be compelled to obtain a certificate of convenience and necessity for "construction into territory contiguous to that already occupied and receiving similar service from another utility." The bill also referred to statements that the state REA "is now sponsoring legislation which would favor public utility companies and handicap rural electrification coöperatives," and asserted that the power program of the New Deal administration has been repudiated by the state REA organization.

Ohio

Report Criticizes Commission

BRANDING the Sherrill commission report on the state public utilities commission as "nothing new," Chairman E. J. Hopple of the state commission recently made a partial reply to the recommendations of Howell Wright, Cleveland attorney, who asserted that the public utilities commission had lost the public confidence.

The Ohio Government Survey said a new deal in public utility and transportation regulation in the state was imperative, and asserted the public utilities commission was forced to operate in 1937 "on a 1930 basis."

Speaking for the entire commission, the chairman declined to go into detail regarding the report until such time as the commission has had an opportunity to examine and study the report. He stated:

"So far as the report is concerned, Mr. Wright is not recommending anything in regard to the judicial functions and operations of the commission which the commission has not been in accord with for the past eight or ten years."

Referring to the charge voiced in the report that the commission had assumed the aspect of a court, the chairman said that counsel for litigants before the commission has been responsible for that situation and has prevented the commission from retaining the form of a fact-finding commission.

The chairman was in agreement with the charges that there was continued delay in the handling of cases in the understaffed engineer-

ing and accountancy divisions. He pointed out that an additional $50,000 was being sought for the commission's biennium appropriation, pending before the legislature, for the employment of additional engineers and accountants.

The Ohio Government Survey was begun in 1935 at the request of Governor Martin L. Davey but the report on the commission was not included in the final report of the survey committee due to the illness of Mr. Wright. Colonel C. O. Sherrill, general chairman, said the fundamental basis of the survey is "a thorough investigation and analysis of the state administrative functions from the viewpoint of practical business men applying the principles of proved business methods and procedure."

The survey said the great failure of the Ohio system was the "inability of the commission to decide or settle rate cases promptly."

Assail Gas Ruling

THE recent decision of the state public utilities commission in the Akron rate case was assailed last month as the Cities Alliance met at Cleveland to continue discussion of plans for a campaign to reduce rates through Federal agencies.

The Akron decision set the rate between 62 and 63 cents per thousand cubic feet. Since it was given the East Ohio Gas Company has demanded a 6 per cent increase in the Cleveland rate, which averages 58 cents. The company was also expected to demand higher rates in more than 50 Ohio cities served by it.

Harry S. Littman, special counsel for Akron, told the conference he believed regulation by the commission should be eliminated, leaving regulation to the courts. Other speakers urged election of commission members rather than appointment.

The conference, comprising representatives of a group of cities in several adjoining states, has been demanding regulation of interstate gas transactions. Representatives of 10 Ohio cities attending the meeting approved the draft of a bill to be introduced in Congress proposing a Federal gas commission.

Grants Franchise

A 25-year franchise and a 10-year street lighting contract were granted by the Marion city council last month to the Marion-Reserve Power Company. A $10,866 reduction in street lighting charges was effected by the new contract.

Mayor Frederick C. Smith emphasized the franchise would not prevent the city from constructing a municipal plant, nor from contracting with another company to furnish service to the city, but was largely an expression of good will to the company.

Oklahoma

Phone Rates Appealed

COMPLAINING that the state corporation commission unfairly ordered a cut in telephone rates in Oklahoma City, the Southwestern Bell Telephone Company on February 11th appealed to the state supreme court to set aside the order.

On November 3, 1936, the commission instructed the company to cut the rates of residential telephones in Oklahoma City 25 cents a month and the business rates 50 cents a month. The company immediately announced its intention to appeal and put up a bond which delayed effectiveness of the reduction pending outcome of the appeal in the supreme court.

In its appeal the company gave twenty reasons why it believed the order should be set aside. Its principal complaint was that the state corporation commission considered only the Oklahoma City exchange in its study of company returns without inquiring into the condition of the more than 100 other exchanges operated by the company which the appeal said were not earning a fair return on the investment. Most of the principles involved in this appeal will be ruled upon by the supreme court when it passes on the appeal of the same company from a state commission ruling cutting Tulsa's telephone rates.

Pennsylvania

Introduces Public Ownership Bill

A MEASURE known as the Kane Public Ownership Bill was introduced in the state legislature on February 10th by Assemblyman Joseph A. McArdle. The act would confer upon counties of the second class the right to construct, own, purchase, and operate public utilities; to contract for the payment therefor, or to have the price fixed by the state public service commission.

It would also provide for referendums to ascertain the will of the electors; to issue bonds or certificates of assignment, pledge, or

hypothecation of the revenues of public utilities, and to fix reasonable rates, services, and facilities. It would also authorize the appointment of managers and other employees, and would provide for collective bargaining with the representatives of the employees thereof. The bill would confer power to enter into contracts with the United States and its instrumentalities for the purchase, transmission, and distribution of hydroelectric power.

Texas

Get REA Cash

Two loan allotments totaling $540,000 for 583 miles of rural electric lines serving 1,872 customers in five Texas counties were announced on February 12th by the Federal Rural Electrification Administration. No mention was made of generating plants, which was said to indicate that current would be bought from privately owned power companies serving the communities.

The two projects for which the 20-year loans were approved were: (1) Texas State Rural Electrification Board of Greenville, $170,000 to build 183 miles of rural lines in Hunt and Collin counties, serving 558 customers; (2) Trio-County Electric Company, Waco, $360,000 for 400 miles of lines in Rains, Hunt and Hopkins counties, serving 1,314 customers.

Fights Antiutility Bill

The Texas Press Association on February 6th closed its 2-day midwinter convention with the adoption of a resolution opposing a bill prohibiting the sale of gas and electrical appliances by utility companies.

The resolution said the bill, which was proposed recently in the House, would be injurious to the best interests of the public as in some small towns and villages it was impossible to obtain dependable appliances at a fair price from other sources.

PWA Allotment Approved

Allotment of $221,818 to Electra, Wichita county, for a municipally owned and operated electric power plant and distribution system has been approved by the President, Public Works Administrator Harold L. Ickes announced on February 9th. Domestic and commercial customers will be served, as well as municipal street lighting.

The PWA allotment consisted of a loan of $122,000 and a grant of $99,818. The latter need not be repaid while the loan is secured by the municipality, it was said.

Wisconsin

Defeat Utility Move

Months of bitter controversy over purchase of the Wisconsin Gas and Electric Company's electric utility at Ft. Atkinson and building of a new electric light plant ended recently when voters defeated the move, 1,650 to 428. Proponents of the acquisition, who had battled hard and long to give the city municipal ownership, had little to say. Councilman Otto Trieloff, leader in the fight, said the "vote speaks for itself," and that he believed the rate reductions put in effect last December by the Wisconsin Gas and Electric Company amounting to $7,659, switched many voters who had been opposed to the private utility.

A citizens' committee led by industrialists of the city, which opposed the acquisition, filed an expense account of $1,000 used largely for letters and literature sent all over the city. Trieloff and other proponents of the acquisition filed expenses of less than $100. The city's survey and other expenses will cost about $2,500, according to estimates. It was a quiet election.

Commission Powerless

A group of ten town of Plymouth, Rock county, farmers, bearing a petition signed by forty-two residents, last month requested the state public service commission to authorize the Wisconsin Power and Light Company to extend electric service to their farms.

The petitioners said they did not want to wait for the Rock county coöperative to extend its lines into the town of Plymouth and, moreover, did not desire service from the coöperative.

The commission replied that it was powerless to act, since at that time there were two vacancies on the three-man commission. The Senate recently rejected Governor LaFollette's appointment of John H. Bickley to succeed Chairman Andrew R. McDonald, resigned. A bill authorizing one commissioner to issue valid orders in case of vacancies on the board has been introduced in the state legislature. In either event the farmers were told that an investigation and hearing would be ordered to consider the petition for company rather than coöperative service.

The Latest Utility Rulings

Contract Rates Are Superseded by Rates Fixed under Regulatory Law

For several years the rule has been quite generally recognized that rates fixed by contract are fixed subject to the reserved power of a state to regulate rates. Nevertheless the United States Supreme Court was recently called upon to pass on one phase of the application of this rule. The court, in a suit by the utility to recover charges under rate schedules, held that no constitutional rights of an electric customer were impaired because rates higher than those fixed by a contract had been filed and put into effect under the provisions of the Missouri regulatory act or because higher rates had been prescribed by the state commission.

The customer did not contend that the state lacked power by appropriate action to establish and enforce just and reasonable rates but that, as against constitutional provisions invoked, the action taken under the Public Service Commission Law was not sufficient to abrogate the contract rates. Specifically it was contended that the state court had construed the statute to make a mere filing of a higher rate schedule, as well as a later promulgation of a schedule by the commission, effective to abrogate the contract rates and to require that the customer pay additional amounts calculated on the basis of the higher rates, although the customer had previously performed the contract and paid the utility company the contract rates.

The Supreme Court pointed out that the customer had had an opportunity to support the contract rates and to test before the commission and in the state supreme court the validity of the filed schedules, but it had failed to do so. It was said that the customer could not reasonably contend that immediate exertion by the legislature of the state's power to prescribe and enforce reasonable and nondiscriminatory rates depended upon, or was conditioned by, specific adjudication in respect of existing contracts; it followed that the rates first filed by the utility and those promulgated by the commission in accordance with the statute had the same force and effect as if directly prescribed by the legislature. *Midland Realty Co. v. Kansas City Power & Light Co.*

Assessments against Railroad for Regulatory and Inspection Cost Held Invalid

A judgment of the supreme court of Washington sustaining the validity of the state law imposing upon certain public utilities, including railroads, a fee of 1/10 of 1 per cent of gross operating revenue was reversed by the Supreme Court of the United States in an action brought by the Great Northern Railway Company against the state of Washington.

The state court had based its decision in favor of the validity of the statute on two grounds: first, that the act was not unconstitutional on its face; second, that, as the answer denied the material allegations of the complaint concerning the operative effect of the act, the railroad company had the burden of proof, which it failed to sustain, and, if the burden were shifted by the case made

by the railroad, the evidence preponderated in favor of the state.

The Federal Supreme Court agreed that the statute did not exhibit a failure reasonably to adjust the fee to the expense of the supervision and regulation of railroads and that the lower court was justified in refusing to hold the statute void on its face. Mr. Justice Roberts, delivering the opinion of the court, said:

> The legislation is to be accorded the presumption of fairness and regularity. It cannot be deduced from the provisions of the act that the amounts collected from the railroads grossly exceed those legitimately expended for inspection and regulation. The appellant insists that such is the necessary inference from the circumstance that the same fee is exacted from public utilities generally, and the collections go into a single fund and are indiscriminately disbursed for the many branches of the department's work. But these facts, without more, do not prove that the amounts derived from the railroads are in excess of the legitimate expenses of inspection and regulation. It may be that, in spite of this lumping of receipts and expenditures, the fees paid by the railroads are no more than enough to defray such expenses.

On the second point, however, the Supreme Court held erroneous the view that the railroad company had the burden of showing that sums exacted from rail carriers substantially exceeded the amounts expended for regulation and supervision, and that the proofs offered were insufficient to shift the burden to the state. It was said to have been demonstrated that while expenses other than those of inspection and regulation of railroads were paid out of the fees, the amount of the excess over what was necessary for regulation and inspection could not be ascertained from the accounts of the State Department of Public Works. The evidence was uncontradicted and conclusive that sums expended for railroad accounts did include substantial and apparently large amounts for activities in the interest of interstate shippers and for the trial of reparation cases before the Interstate Commerce Commission. The court held that it was impossible to sustain the state court's conclusion that such testimony had any probative value upon the sole issue in the cause, which was whether the statute subjected the railroads to an unreasonable charge for inspection and regulation. Justice Roberts continued:

> . . . the state is at liberty to intermingle duties involving costs properly chargeable to the railroads, with others involving costs not so chargeable, but if it does so, and the exaction is challenged, it must assume the burden of showing that the sums exacted from the appellant do not exceed what is reasonably needed for the service rendered. The state failed to carry this burden.

Great Northern Railway Co. v. State of Washington.

Ohio Commission Changes Natural Gas Rates Prescribed in Ordinance

THE Ohio commission sustained a complaint and appeal by the East Ohio Gas Company as to an ordinance passed by the city of Akron prescribing net rates of 63 cents per month for the first 1,000 cubic feet, or less, or none, and 45 cents per thousand cubic feet for all over 1,000 cubic feet, with a $1 meter-setting charge. The commission sustained a 38½-cent rate paid to the Hope Natural Gas Company for gas supplied, after an investigation of the cost of the gas to that company. Commissioner Schaber dissented and Commissioner R. D. Williams expressed his dissatisfaction with the elimination of going concern value and the cost of "stock plan deposits."

The commission allowed a return of 6½ per cent upon the value as determined by reproduction cost less depreciation. It was said, however, that the commission had not rejected original or historical cost but had considered testimony concerning such evidence as an aid in determining the accuracy and certainty of

the findings in reproducing the property of the companies new less depreciation. The commission was bound by Ohio law to follow the statutory formula, namely, reproduction cost new and depreciated.

Federal income tax and Ohio excise tax were included at the actual amounts paid by the company. The commission recognized that wages and other costs of operation might be higher, but, on the other hand, the improvement in economic conditions, it was pointed out, might also result in increased sales for the company, with resulting gains that would more than offset the increased expenses of all operations of the utility.

Allowance was made for development cost for expenditures necessarily incurred to provide producing acreage, although Commissioner Schaber in his dissenting opinion said that an allowance for expenditures incurred in developing leaseholds was an allowance for payments for delay rentals upon leases in reserve, and that there were included costs for acreage which would never be used and useful in the service of gas consumers. He said it was nothing but "old man delay rentals' on unoperated leases disguised in a new fantastic garb." *Re East Ohio Gas Co. (No. 8276).*

Ratepayers Denied Right to Intervene

An order of a Federal district court denying the motion of the San Antonio Utilities League for leave to intervene in a rate case was sustained by the circuit court of appeals, fifth circuit. The telephone company and the city of San Antonio, after several years of hardly contested litigation, had settled their controversy and submitted the settlement in form of a consent decree to the district court for its approval. The decree fixed a rate and provided for refunds to subscribers on that basis.

The league opposed entry of the consent decree in so far as it directed refunds on the basis of the agreed-on rate. Apart from the fact that the decree could not be accepted in part and rejected in part but must be accepted or rejected as a whole, the court said there was nothing which took the case out of the general rule that allowance or refusal of a petition to intervene is discretionary and not a final order upon which an appeal will lie. The court said further:

> That, generally speaking, individual subscribers have no direct and immediate interest in a rate controversy and suit sufficient to authorize them to maintain or prosecute it, and that the matters involved in such a suit are matters entirely between the parties to it, the utilities and the city, is settled by the authorities.

San Antonio Utilities League et al v. Southwestern Bell Telephone Co. et al. 86 F. (2d) 584.

Depreciation Rate Fixed for Company Having Excessive Reserve

The Oregon commisioner, in fixing future depreciation rates for a telephone company, took into consideration the fact that the company had an excessive reserve balance. The commissioner said:

> There are, of course, instances where the amount collected for depreciation has been insufficient, and other instances where the amount collected from the ratepayers for depreciation has been excessive. In neither of these cases will the balance in the depreciation reserve on the company's books equal the accrued depreciation existing in the property.
>
> If proper depreciation rates are used the depreciation reserve balance should approximate very closely the actual depreciation existing in the property, and unless it does so, the utility's stockholders or ratepayers are

being injured. In the present instance we feel that too much has been collected from the ratepayers for depreciation in past years.

Criticism was made of the company's method of segregating depreciation reserve balance into primary accounts by prorating the reserve balance on the ratio that the depreciable fixed capital primary accounts bore to the total depreciable fixed capital. It was said that this method assumed that the property in each primary account was of the same average age and had depreciated to the same extent, but that any breakdown of a depreciation reserve balance into primary accounts will require an analysis of the debits and of the credits to the reserve account and an assignment thereof to the various primary accounts. *Re Oregon-Washington Telephone Co. (U-F-704-T49, P. U. C. Or. Order No. 3987).*

Railway Not Required to Honor Weekly Passes on Rapid Transit Line

THE Wisconsin commission found that the class of service given by a local rapid transit line differed so markedly from service given on the local city line in the city of Milwaukee that there was no undue discrimination in the maintenance of different rate schedules. The commission sustained the existing fares on the rapid transit line and held that a petition for extension of the weekly pass to the local rapid transit line was not justified.

The company had contended that the service was clearly distinct in that special types of high speed cars were used which operated over a private right of way free from grade crossing with but few stops, that the traffic on the line was light, that the cost of giving the local rapid transit service was almost three times as great as the revenue derived from it, and that the entire rapid transit division earned practically no net revenue, while the entire railway system earned an amount equal to a return on the investment of but 2.8 per cent. *Eckman et al. v. Milwaukee Electric Railway & Light Co. (2-R-610).*

New York Court Rules on Question of Stay Pending Appeal

WHILE ordinarily an appellate court will not determine the propriety of a lower court action on a motion to stay proceedings pending appeal when the appellate court has disposed of the entire controversy, the appellate division of the New York Supreme Court reviewed such an order, Justice Heffernan stating:

> . . . the decision of the question involved on this appeal is of no importance in this case and ordinarily we would be inclined to dismiss the appeal. We think the question presented, however, is of sufficient importance to require its determination by this court. The issue is one likely to frequently arise and consequently we desire to formulate the rule which should guide the special term in the future in dealing with applications for a stay.

The court then ruled that when the utility company had presented proof showing the presence of questions of substance for consideration by the appellate court and had also made a proper showing of irreparable damage, it became entitled to the granting by the lower court of the stay requested. The motion for the stay did not require the court below to decide the issues presented upon which it sought the annulment of the Commission's order, but merely to ascertain whether questions of substance were presented for consideration by the higher court, and whether, if these questions

should be finally determined in favor of the company, it would suffer irreparable damage in the meantime. Justice Heffernan continued:

> It appears from its opinion that the court below predicated its decision on the erroneous assumption that it was necessary for that court, in order to grant the stay, to find that the order of the commission was unreasonable, arbitrary, or capricious. Obviously a finding that the commission's action is unreasonable, arbitrary, or capricious requires a determination of the issues on the merits. Such a determination cannot be made by the special term.

New Rochelle Water Co. v. Maltbie et al.

Reorganization Suggested Instead of Refunding Bond Issue by Overcapitalized Company

THE Wisconsin commission denied authority to issue $95,000 of bonds to refund outstanding bonds in a like amount when the outstanding bonds alone were about equal to the undepreciated book value of the property and equal to 150 per cent of the depreciated book value, resulting in no equity for the stockholders.

Outstanding common stock amounted to $85,000, and it was pointed out that this alone exceeded the book amount of net assets, and that irrespective of any bond issue the company was overcapitalized and no amount of bonds or other type of securities should be issued as long as this condition obtains. The public service commission suggested however:

> If a reorganization of the financial structure of petitioner is accomplished which will provide for the issuance of $35,000 principal amount of 4 per cent bonds and $40,000 par value of common stock, in lieu of the amount of stock and bonds now outstanding, the commission believes that it could make the necessary statutory findings as a prerequisite to the issuance of these amounts of securities.

Re Stoughton Light & Fuel Co. (2-SB-82).

Other Important Rulings

THE court of appeal of Louisiana, second circuit, sustained an electric utility company in its discontinuance of electric service because of tampering with a customer's meter so as to prevent registration of current. The court pointed out that the customer in his contract had agreed to protect the company's property from loss or damage and not to permit anyone not an agent of the company to remove or tamper with the company's property or its operation. A utility rule authorizing such discontinuance was not deemed necessary. *Jones v. Southwestern Gas & Electric Co. 171 So. 163.*

The Michigan commission, in reporting to the court on new evidence on the application of the Grand Rapids Gas Light Company for approval of the construction of a natural gas pipe line to serve natural gas, pointed out that since the company had contracted with the owners of gas acreage, leases, and wells to purchase whatever gas might be produced at the well-head and delivered through meters to the company at a specified rate per thousand cubic feet, the company did not own this gas until it was reduced to possession; that it did not own the gas "in place." This ruling was in connection with the determination of available gas for furnishing a full natural gas supply rather than mixed gas. *Re Grand Rapids Gas Light Co. (D-3000).*

The New York appellate division has ruled that recovery against an electric company for failure to furnish service should not be granted when the plaintiff

had made no written application for restoration of service and where the plaintiff had procured the furnishing of service to himself by subterfuge to procure service for a relative who was in default. *McMullin v. New York Power & Light Corp. 291 N.Y. Supp. 523.*

The Colorado commission dismissed an application to lease a permit for motor carrier operation where the lessor testified that he was not willing to execute any lease of the permit. The commission said that it was obvious that before a lease might be approved by the commission it must affirmatively appear that both lessor and lessee are desirous of securing such commission approval. *Re Russell (Application No. 3694-PP-A, Decision No. 9114).*

The Connecticut commission refused to construe the statutes relating to contract carriers so as to require a finding that public convenience and necessity require the operation of service applied for before operating authority is granted, the commission stating that the statutory authority is lacking as is also the power of the state to limit the number of contract carriers by the finding of public convenience and necessity applicable to common carriers. *Re Marshall (Docket No. 6432).*

The Utah commission dismissed an application for a permit to operate as a contract motor carrier of property between localities adequately served by common carriers, stating that the mere desire of certain shippers to use the applicant's proposed service, when and if found advantageous to them, would not justify granting the permit, more especially when the traffic proposed to be taken care of already was being handled satisfactorily by existing common carriers in such localities. *Re Arrow Auto Line (Case No. 1822).*

The West Virginia commission dismissed without prejudice a request for an increase in natural gas rates where the predecessor of the utility had transferred wells and other production property to an affiliated company. The commission held that the utility had the burden of showing by competent evidence that this transfer did not adversely affect the customers, in view of the fact that the utility was purchasing gas from these wells. *Re Southeastern Gas & Water Co. (Case No. 2458).*

The North Carolina commission authorized a telephone company to discontinue two-party service in a city where there were few two-party lines in service and subscribers demanded mostly single-party service or four-party service. Discontinuance, however, was not to affect present customers but was to apply to future subscribers. *Re Durham Telephone Co.*

The Alabama commission ordered that the rates of the Southern Bell Telephone and Telegraph Company for handsets should be 15 cents a month for a continuous period of twenty-four months, and that thereafter there should be no extra charge, provision being made for credits to present users of such equipment. *Berkowitz v. Southern Bell Telephone and Telegraph Co. (Docket 6943).*

The Connecticut commission, in denying authority to operate a motor bus service, referred to persons favoring the petition because they were aggrieved by the quality of the existing public transportation and stated that such grievances are appropriate to a consideration of how the existing service might be improved rather than to a decision as to the necessity for an additional service. *Re The Chieppo Co. (Application No. 2043).*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Points of Special Interest

Titles and Index

TITLES

INDEX

PENNSYLVANIA PUBLIC SERVICE COMMISSION

Re Yellow Cab Company of Philadelphia

[Application Docket No. 34998, Securities Dockets Nos. 210, 211.]

Consolidation, merger, and sale, § 13 — Approval of merger — Type of merger.

1. The Public Service Company Law, requiring approval of a merger of a public service company with any other corporation, does not specify only mergers of the Pennsylvania type, whereby the merger results in the cessation of the existence of the merging corporations and the creation of a new corporation, p. 434.

Valuation, § 371 — Good will — Unproven items — Not capitalizable.

2. An item of good will arising from some transaction the details of which are not known is, because of its unproven value, uncapitalizable, p. 435.

Valuation, § 371 — Good will — Excess purchase price — Not capitalizable.

3. An item of good will representing excess price paid above the value of assets acquired is not capitalizable, p. 435.

Valuation, § 153 — Management fees during construction — Taxicab company.

4. An item for management fees during construction should not be capitalized by a taxicab company when the company does not own any assets which require a period of construction during which management costs would be chargeable as an asset, p. 435.

Valuation, § 257 — Worthless investment — Not subject to capitalization.

5. An investment of a taxicab company in cab companies which are without assets is not subject to capitalization since the investment is worthless, p. 435.

Valuation, § 257.1 — Uncollectible accounts receivable — Not capitalizable.

6. Accounts receivable representing amounts due from companies which have no assets, and which are therefore known to be uncollectible, will not be allowed in finding a basis for a stock issue, p. 435.

Security issues, § 87 — Excessive amount — Authorization subject to conditions — Merger.

7. Issuance of no par common and par value preferred stock in excess of the capitalizable assets of a taxicab company was authorized in order to permit the consummation of a merger of companies, upon condition that the company make entries upon its books of account as directed by the Commission to eliminate uncapitalizable items and that the company, in accordance with a stipulation, take necessary steps to retire the authorized preferred stock in order to issue in lieu thereof shares of preferred stock without par value, the stated capital applicable to the no-par preferred shares not to exceed such amount as the Commission might find to be the equity assignable to such stock, p. 436.

Accounting, § 12.1 — Uncapitalizable items — Merger.

8. A company which is authorized to merge a holding company should transfer uncapitalizable items, disapproved as assets by the Commission,

to a deferred charge account and amortize such assets to surplus, either in one sum or in annual instalments over a period of years, p. 436.

Consolidation, merger, and sale, § 19 — Merger of parent corporation.

9. A corporation holding all the stock of a taxicab corporation was authorized to be merged into the taxicab corporation under an agreement of merger providing for acquisition of all assets by the taxicab company, assumption of all liabilities, and delivery of stock to the stockholders of the merged corporation, approval being found necessary or proper for the service, accommodation, or convenience of the public, p. 436.

[December 21, 1936.]

APPLICATIONS *for approval of merger of taxicab holding corporation with operating corporation, issuance of common stock without par value, and issuance of cumulative preferred stock with par value; applications granted subject to conditions.*

By the COMMISSION: Yellow Cab Company of Philadelphia hereafter referred to as "petitioner," is a corporation formed in Delaware in 1920, and operates a taxi service in Philadelphia. Higgins Incorporated, chartered in Delaware in 1935, is a corporation formed primarily for the purpose of facilitating the segregation of the taxi service from the other activities of Philadelphia Rapid Transit Company, and in pursuance of that purpose it acquired all of the capital stock of petitioner.

[1] On May 13, 1936, petitioner and Higgins Incorporated entered into an "agreement of merger," which provided that "Higgins Incorporated shall be merged into and with Yellow Cab Company of Philadelphia" and that "Yellow Cab Company of Philadelphia shall be the surviving corporation." From this language it becomes apparent that the word "merger" is not used in the same sense in both Delaware and Pennsylvania, for, under our law, a merger results in the cessation of the existence of the merging corporations and the creation of a new corporation—there is no survivor. However, The Public Service Company Law does require approval of a merger of a public service company with any other corporation, and that act does not specify only mergers of the Pennsylvania type.

The merger agreement provides for the acquisition by petitioner of all of the assets of Higgins Incorporated, and the assumption of all of its liabilities, and further provides that petitioner would deliver its stock to the Higgins Incorporated stockholders in such number of shares and in such classes that their holdings in petitioner upon completion of the transaction would be identical with their former holdings in Higgins Incorporated. Since the latter had outstanding 15,000 shares of no-par common stock, and $225,600 of preferred, and since petitioner then had 5,000 shares of common outstanding, all of which was held by Higgins Incorporated, it was and is necessary for petitioner to issue 10,000 additional shares of common and $225,600 of preferred stock pursuant to the merger agreement. Application has been made to us for approval of such issu-

ance, and we will consider this matter before further discussing the merger itself.

Petitioner has submitted to us a consolidated balance sheet of itself and Higgins Incorporated as of September 30, 1936, which balance sheet shows a net equity value of $1,471,361.27. It is our present purpose to determine how much of that equity is capitalizable.

[2, 3] The first account on this balance sheet requiring discussion is "Goodwill—$19,390." Petitioner has offered a statement which shows this item to consist of:

Arising from some transaction prior to 1933, the details of which are not known	$4,390
In 1930, the company acquired the assets of Hartel Cab Company for which it paid the amount of $61,602.43. The value of the assets acquired was . . . $46,602.43. —excess price	15,000
	$19,390

Because of the unproven value of the first item, and the obviously uncapitalizable nature of the second, we must consider all of the account "Goodwill" to be without value for the present purpose.

[4] The second item for discussion is "Management Fees during Construction—$19,587.22." Petitioner's witness testified that this account was inherited at the time the company was freed from Philadelphia Rapid Transit Company control. In our opinion, this item should not be capitalized, for petitioner does not own any assets which require a period of construction during which management costs would be chargeable as an asset.

[5] The third item for comment is "Other Investment Securities—$106,276.79." Of this amount, $15,165.25 is in government securities and in four other items carried at $1 each. The balance is made up as follows:

Subsidiary companies (100% ownership):	
Brown and White Cab Company	$54,392.55
Diamond Cab Company	36,717.99
Quaker City Cab Company	1.00
	$91,111.54

At the hearing on these cases, petitioner's witness (Higgins) testified that these companies had no assets. Obviously, since these companies are without assets, the investment of petitioner in them is also worthless, and not subject to capitalization.

[6] Similar comment is applicable to $1,159,127.68 of the item "Other Accounts Receivable — $1,278,547.07." The former figure represents amounts due petitioner by Quaker City Cab Company and Diamond Cab Company. Since these amounts are known to be uncollectible, they will not be allowed in finding a basis for a stock issue.

Summarizing the items, we find the capitalizable equity in petitioner and Higgins Incorporated, at September 30, 1936, to have been as follows:

As shown by balance sheet:		
Common stock (as proposed)	$15,000	
Preferred stock (as proposed)	225,600	
Earned surplus	447,164	
Capital surplus	783,597	
		$1,471,361
Disallowed assets chargeable against equity:		
Goodwill	19,390	
Management fees during construction	19,587	
Other investment securities	91,111	
Other accounts receivable	1,159,128	
		1,289,216
Capitalizable equity		$182,145

We therefore also find that this equity is not sufficient to support the proposed capitalization.

[7, 8] Petitioner is desirous of consummating the proposed merger before December 31, 1936, and has asked that we approve these stock issues in order that the merger may be accomplished. To this end, petitioner has filed of record a stipulation that, if the Commission approves these three applications, it will take such steps as may be necessary to retire, within thirty days thereafter, the $225,600 of 6 per cent preferred stock which would be authorized by such approval, and will ask our consent to issue in lieu thereof 2,256 shares of preferred stock without par value, bearing a dividend rate of $6 per share per annum, and in other respects similar to the par value preferred stock for which authorization is sought herein. It has further stipulated that the stated capital applicable to the no-par preferred shares would not exceed such amount as the Commission may find to be the equity in petitioner assignable to said stock.

Under the arrangement thus proposed, petitioner would be temporarily overcapitalized in order to facilitate the merger with Higgins Incorporated, but this defect would be cured within thirty days. We have no objection to the merger as such, and will permit the issuance of stock as applied for, under the conditions recited in the stipulation heretofore described, and subject also to the provision that petitioner, prior to issuance of the stock herein authorized, make entries upon its books of account as hereinafter set forth. We are of the opinion that the assets to which we have taken exceptions, aggregating $1,289,216, should be transferred to a deferred charge account and amortized to surplus, either in one sum or in annual instalments over a period of not exceeding ten years, as petitioner may elect. We will include a requirement to that effect in our order.

[9] Upon consideration of these applications, the amount and character of the securities involved herein, and other relevant matters, the Commission finds and determines that the purpose of the issuance of the securities is authorized by law; that the issuance of said securities subject to the conditions hereinafter recited is reasonably necessary for that purpose, and that approval of the applications is necessary or proper for the service, accommodation, or convenience of the public.

The foregoing finding and determination, however, shall not be construed to imply any guaranty or obligation on the part of the commonwealth of Pennsylvania as to such securities, nor shall it be taken as requiring the Commission, in any proceeding brought before it for any purpose, to fix a valuation which shall be equal to the total of these and any other outstanding securities of petitioner, or to approve or prescribe a rate which shall be sufficient to yield a return on said securities; therefore,

Now, to wit, December 21, 1936, it is *ordered*: That the merger of Yellow Cab Company of Philadelphia with Higgins Incorporated be and is hereby approved, and that a certificate of public convenience issue in evidence thereof.

It is *further ordered:* That the issuance by Yellow Cab Company of Philadelphia of 10,000 shares of its common stock, without par value but with a stated value of $1 per share, be and is hereby approved, and that a certificate of public convenience issue in evidence thereof.

It is *further ordered*: That, subject to the following conditions, the issuance by Yellow Cab Company of Philadelphia of $225,600 of its 6 per cent cumulative preferred stock, par value $100 per share, be and is hereby approved, and that a certificate of public convenience issue in evidence thereof.

1. That within thirty days hereafter, Yellow Cab Company of Philadelphia take such steps as may be necessary to retire said $225,600 of 6% cumulative preferred stock, and ask this Commission's consent to issue in lieu thereof 2,256 shares of $6 cumulative preferred stock without par value, but with a stated value not greater than the Commission shall find to be the equity in said company assignable to said stock.

2. That prior to the issuance of the stock herein authorized, Yellow Cab Company of Philadelphia make the following entry on its books of account:

Unappropriated Surplus	$447,164.17	
Capital Surplus	783,597.10	
Other Surplus Reserves		$1,230,761.27

It is *further ordered*: That petitioner also make the following entry on its books of account:

Other Deferred Charges	$1,289,216.44	
Good will		$19,390.00
Management Fees during Construction		19,587.22
Other Investment Securities		91,111.54
Other Accounts Receivable		$1,159,127.68

and that it amortize said $1,289,216.44 of Other Deferred Charges by charges to Other Surplus Reserves, and to Unappropriated Surplus when said Other Surplus Reserves shall have been exhausted, either in one sum or in annual instalments over a period of not exceeding ten years, as the company may elect.

MISSOURI SUPREME COURT

State ex rel. Empire District Electric Company

v.

Public Service Commission of Missouri

(— Mo. —, — S. W. (2d) —.)

Depreciation, § 5 — Powers of Commission — Replacement of reserve — Retroactive orders.

1. A Commission which is authorized, after hearing, to require the accumulation of a depreciation reserve and to fix rates of depreciation has no power to order a public utility which has voluntarily created a depreciation reserve to replace in the reserve amounts previously transferred to surplus, p. 439.

Depreciation, § 40 — Ownership of reserve.

2. A depreciation reserve, whether accumulated voluntarily or pursuant to an order of the Commission, comes from revenues which the customers pay for service and for that reason it belongs to the company; and when the purpose of the reserve, to keep the property in proper condition for efficient service, has been accomplished, the company cannot be forced to give up for the benefit of future customers the balance remaining, p. 440.

Depreciation, § 10 — Purpose of reserve — Public interest.

3. The only purpose of a depreciation reserve so far as the public is concerned is to guarantee that the company's property will be kept in proper condition so that efficient service may be rendered, p. 440.

Depreciation, § 39 — Adequacy of reserve — Presumptions.

4. It must be assumed that amounts transferred by a public utility company from depreciation reserve to surplus were not needed to maintain the property adequately so that efficient service might be rendered to customers when there is no showing to the contrary and no complaint has been made as to the condition of the property or the character of service rendered, p. 440.

Depreciation, § 3 — Power of Commission — Replacement of reserve — Necessity.

5. The Commission, even if it had power to order a public utility to restore to a depreciation reserve, voluntarily created, amounts previously transferred to surplus, could require only such amounts thereof to be replaced as would make the depreciation reserve adequate for the needs of the company, p. 442.

Commissions, § 17 — Statutory authority — Effect of rules.

6. Rules of the Commission cannot be invoked in support of a Commission order when such order is not authorized by statute, since the source of the Commission's power is the statute and not its own rules, p. 443.

[December 14, 1936.]

APPEAL *from judgment of circuit court affirming order of Commission which directed a public utility company to replace in depreciation reserve amounts previously transferred to surplus; reversed. For Commission decision see 13 P.U.R. (N.S.) 478.*

FRANK, J.: This is an appeal by the Empire District Electric Company, a Kansas corporation, from a judgment of the circuit court of Cole county affirming an order of the Public Service Commission. For brevity we will refer to relator as the company and to respondents as the Commission.

This cause was instituted by the Commission on its own motion against the company to determine the fair value of the company's property. The Commission made an appraisal of the company's properties and an audit of its books and accounts. Thereafter hearings were had before the Commission as to the value of the company's property and as to the audit of its books and accounts as made

by the Commission. At such hearing evidence pro and con was heard as to the cost of reproduction less depreciation of the company's used and useful property.

It was further shown at said hearing that the company in the year 1915 voluntarily began the accumulation out of earnings of a depreciation reserve which, by the year 1923, reached the sum of approximately $1,000,000; that in that year the company's board of directors adopted a resolution to the effect that there was an overaccrual in the depreciation reserve amounting to $400,000 and said sum of $400,000 was by authority of said board transferred from depreciation reserve to surplus, leaving in the depreciation reserve approximately $864,000; that in the year 1926 another sum of $400,000 was so transferred, leaving the depreciation reserve at that time the sum of $1,176,000. Again in 1929 the sum of $800,000 was transferred from depreciation reserve to an account called "Special Surplus Reserve" where it still remains, leaving in the depreciation reserve in the year 1930 the sum of $1,226,000; that the $800,000 which was transferred from depreciation reserve to surplus was disbursed in the payment of dividends to the stockholders before the institution of the present proceedings; that each year from 1915 to and including the year 1935, the company made annual reports to the Commission which showed the transfer of funds as above indicated.

Other necessary facts will be stated in course of the opinion.

[1] At the conclusion of the hearing, the Commission on August 6, 1935 (10 P.U.R.(N.S.) 302) ordered that the $1,600,000 which had been transferred from the depreciation reserve fund be replaced in that fund. The legality of that order is the only question presented for decision on this appeal.

There is no statute requiring the company to carry a depreciation reserve account. However, there is a statute, § 5200, Rev. Stats. Mo. 1929, which gives the Commission power, after hearing, to require the company to carry such an account, subject to the control of the Commission. That section of the statute reads as follows:

"The Commission shall have power, *after hearing,* to require any or all gas corporations, electrical corporations, and water corporations to carry a proper and adequate depreciation account in accordance with such rules, regulations, and forms of account as the Commission may prescribe. The Commission may, from time to time, *ascertain and determine and by order fix* the proper and adequate rates of depreciation of the several classes of property of such corporation, person, or public utility. Each gas corporation, electrical corporation, and water corporation shall conform its depreciation accounts to the rates *so ascertained, determined, and fixed,* and shall set aside the moneys *so* provided for out of earnings and carry the *same* in a depreciation fund and expend *such fund* only for such purposes and under such rules and regulations, both as to original expenditure and subsequent replacement, as the Commission may prescribe. The income from investments of money in *such fund* shall likewise

be carried in such fund." (Italics ours.)

The facts show that the Commission, at no time, made any order requiring the company to set up or carry a depreciation reserve. The silence of the Commission on that subject from 1915 to the date of the present hearing in 1935, necessarily left the question of a depreciation reserve and the upkeep of the property to the judgment of the board of directors of the company. The power of the Commission to make orders relative to the depreciation reserve of the company is conferred by statute. We must, therefore, look to the statute to determine whether the Commission had authority to make the order in question. It has been well said that "when a particular power is exercised by the Commission, or is claimed for it, that power should have its basis in the language of the statute or should be necessarily implied therefrom." People ex rel. New York R. Co. v. Public Service Commission, 223 N. Y. 373, P.U.R.1918F, 125, 119 N. E. 848; Havre de Grace & P. Bridge Co. v. Towers, 132 Md. 16, P.U.R.1918D, 484, 103 Atl. 319. Turning to the statute we find that it gives the Commission power, after hearing, to make an order requiring the company to carry a depreciation reserve account in an amount fixed by the Commission, subject to the regulatory control of the Commission. Such an order, if made, would operate prospectively and give the Commission regulatory control of the depreciation reserve created by its order. But that is not the situation in this case. Here the Commission stood by through the years without making any order requiring the company to set up or carry a depreciation reserve, and by its silence and tacit consent permitted the company to voluntarily accumulate a reserve and use it for such purposes as, in the judgment of the board of directors of the company, was proper. Some years after this was done the Commission then made a retroactive order, the effect of which was to look back through the years and nullify orders made by the company's board of directors relative to the depreciation reserve, when there was no statute or order of the Commission which prohibited the making of such orders at the time they were made. This retroactive order was illegal and void because the Commission had no authority to make it.

[2–4] Aside from the want of statutory authority to make the order, it is wrong in principle. A depreciation reserve whether accumulated voluntarily or pursuant to an order of the Commission, comes from revenues which the customers pay for service and for that reason it belongs to the company. The only purpose of a depreciation reserve, so far as the public is concerned, is to guarantee that the company's property will be kept in proper condition so that efficient service may be rendered. When that purpose is accomplished, the balance remaining in the depreciation reserve belongs to the company, and the company cannot be forced to give it up for the benefit of future customers. Decisions of the Supreme Court of the United States support this conclusion. In Public Utility Comrs. v. New York Teleph. Co. 271 U. S. 23, 70 L. ed. 808, P.U.R.1926C, 740,

744, 46 S. Ct. 363, that court, among other things, said:

"It may be assumed, as found by the Board, that in prior years the company charged excessive amounts to depreciation expense and so created in the reserve account balances greater than required adequately to maintain the property. It remains to be considered whether the company may be compelled to apply any part of the property or money represented by such balances to overcome deficits in present or future earnings and to sustain rates which otherwise could not be sustained.

"The just compensation safeguarded to the utility by the Fourteenth Amendment is a reasonable return on the value of the property used at the time it is being used for the public service. And rates not sufficient to yield that return are confiscatory. (Citing cases.) . . . The revenue paid by the customers for service belongs to the company. The amount, if any, remaining after paying taxes and operating expenses, including the expense of depreciation, is the company's compensation for the use of its property. If there is no return, or if the amount is less than a reasonable return, the company must bear the loss. Past losses cannot be used to enhance the value of the property or to support a claim that rates for the future are confiscatory. (Citing cases.) And the law does not require the company to give up for the benefit of future subscribers any part of its accumulations from past operations. Profits of the past cannot be used to sustain confiscatory rates for the future. (Citing cases.)"

The opinion in this case concludes as follows:

"Customers pay for service, not for the property used to render it. Their payments are not contributions to depreciation or other operating expenses, or to capital of the company. By paying bills for service they do not acquire any interest, legal or equitable, in the property used for their convenience or in the funds of the company. Property paid for out of moneys received for service belongs to the company, just as does that purchased out of proceeds of its bonds and stock. It is conceded that the exchange rates complained of are not sufficient to yield a just return after paying taxes and operating expenses, including a proper allowance for current depreciation. The property or money of the company represented by the credit balance in the reserve for depreciation cannot be used to make up the deficiency."

In the instant case it was the duty of the company to adequately maintain its property so that efficient service might be rendered to its customers. Evidently the amounts transferred from the depreciation reserve were not needed for that purpose. We say this because on the record before us we must assume that the company properly maintained its property and rendered efficient service, because there was no showing to the contrary, and no complaint made as to the condition of the property or the character of service rendered during the time in question. In this situation any amount remaining in the depreciation reserve belongs to the company. The company cannot be forced to leave its own funds in the depreciation re-

serve for the benefit of future customers, who are themselves supposed to pay a rate for service sufficient to cover depreciation, cost of operation, and a fair return to the company during the time they are served.

The Commission contends that the company had no authority to withdraw any funds from the depreciation reserve without the consent of the Commission, or expend any part thereof for any purpose except as prescribed by the Commission. That would be true, if the Commission had exercised its regulatory powers, and by order required the company to carry a depreciation reserve, and fixed the amount thereof. But since the Commission never attempted to regulate the depreciation reserve, and by its inaction left that question to the judgment of the company, it cannot years afterward by a retroactive order undo what the company has done in the past. If, and when, the Commission decides to fix and regulate the depreciation reserve of the company, it must accept the property and funds of the company in the condition in which it finds them at that time, and make regulations for the future. The statute is prospective in its operation and not retroactive.

The Commission contends that independent of the Public Service Commission Act it was the duty of the company to carry a depreciation reserve. Knoxville v. Knoxville Water Co. (1909) 212 U. S. 1, 53 L. ed. 371, 29 S. Ct. 148, is cited in support of this contention. The cited case does not support the Commission's contention, but we need not discuss that question because there was no showing or finding that the company did not carry an adequate and proper depreciation reserve. It is conceded there was $1,226,000 left in the depreciation reserve after the transfers were made from that account. Moreover it does not appear that there was any complaint of the condition of the company's property or the character of the service rendered during the times in question. In that situation we must presume that the company adequately maintained its property. At the conclusion of the hearing the Commission did not fix the value of the property. Concerning the depreciation reserve, it made the following finding:

"We are unable to determine whether or not excessive accruals actually had been placed in the reserve or whether the reserve shown in the books is adequate or inadequate for the company's needs." (10 P.U.R. (N.S.) at p. 316.)

[5] If the Commission had regulatory control over the fund voluntarily created by the company, which in our judgment it did not have, still the order would be void because the findings made by the Commission would not support it. Conceding, for the sake of argument only, that the Commission had authority to require any part of the fund in question to be replaced in the depreciation reserve, certainly it could only require such amount thereof to be replaced as would make the depreciation reserve adequate for the needs of the company. In face of the statement in the Commission's order that it could not determine whether the reserve shown in the books was adequate or inadequate for the needs of the company, there was

no basis for an order requiring the company to place additional funds therein.

[6] Certain rules of the Commission are invoked in support of its contentions. The source of the Commission's power is the statute and not its own rules. Since the Commission had no statutory authority to make the order in question, no purpose would be served in discussing the provisions of the rules of the Commission.

The report and order of the Commission reviews the history of the company, and criticizes the methods used in the acquisition of its properties and the manner in which it has conducted its business. Whether the Commission was right or wrong in such criticism has nothing to do with the statutory authority of the Commission to make the order in question, and for that reason we will not burden this opinion with a discussion of that part of the report.

For the reasons stated, the judgment of the circuit court affirming the order of the Commission should be reversed. It is so *ordered.*

NEW YORK DEPARTMENT OF PUBLIC SERVICE, STATE DIVISION, PUBLIC SERVICE COMMISSION

Re Cabot Gas Corporation

[Case No. 8864.]

Certificates of convenience and necessity, § 104 — Natural gas pipe line — Industrial service.

Authority should be granted to a natural gas company to construct a pipe line from gas fields near the state line and over the line in an adjoining state to furnish industrial gas service to manufacturing plants, a natural gas utility, and domestic customers along the line, notwithstanding possible waste of natural resources, displacement of the use of coal to the detriment of railroad and coal companies, and objections by gas utilities in the territory, where, because of lack of Commission jurisdiction to conserve natural gas resources, there is no assurance that denial of authority would conserve the gas supply and any attempted protection of any industry or of any area would be either ineffectual or would merely transfer the effect elsewhere until a broad scheme of conservation is adopted.

Conservation, § 1 — Natural gas.

Discussion of the conservation of natural gas resources, p. 445.

Conservation, § 3 — Powers of Commission.

Discussion of the lack of New York Commission authority to determine how natural gas resources shall be developed, p. 446.

Monopoly and competition, § 3 — Natural gas and other fuels — Conservation.

Discussion of public policy involved in permitting owners of extensive

natural gas leaseholds and wells to dissipate these resources by selling them to large industrial concerns for cheap fuel purposes at low competitive prices which displace coal and at the same time deprive railroads of a large source of freight revenue, p. 473.

(LUNN, Commissioner, concurs in separate opinion; BURRITT, Commissioner, dissents.)

[September 23, 1936.]

PETITION *by a gas company for authority to construct a natural gas plant and exercise franchises in certain towns; petition granted.*

APPEARANCES: For the Cabot Gas Corporation: Fred C. Fernald, Boston, Mass.; Oviatt, Gilman, O'Brien & Barnsdale, Rochester; Griggs, Baldwin & Baldwin, by Colonel Charles G. Blakeslee, New York city; Willard F. Hine, Engineer, New York city.

For Pavilion Natural Gas Company: Chas. F. Fundinger, Vice President, Geneseo.

For Rochester Gas & Electric Corporation: Whitman, Dey & Nier, by Earl L. Dey, Rochester; Wm. L. Wherry, New York city.

For Republic Light, Heat & Power Company: John Howell, Buffalo.

For Empire Gas & Fuel Co., Ltd.: Ellis J. Hopkins, Wellsville.

For Producers Gas Co. and Belmont Quadrangle Drilling Corporation: Quigley & Vedder, by Earl C. Vedder, Olean.

For Empire Gas & Electric Company, Elmira Light, Heat & Power Company, Tri-County Natural Gas Company, New York State Electric & Gas Corporation, Caledonia Natural Gas Company, New York Central Electric Corporation: E. B. Naylon, New York city.

For Syracuse Lighting Company: LeBoeuf, Winston, Machold & Lamb, by Chauncey P. Williams, New York city.

For Pittsburgh Coal Co., Inc.: John E. Connor, Mount Morris; O. K. Price, Pittsburgh, Pa.

For General Coal Company: Killeen & Sweeney, by Henry W. Killeen, and C. R. Sweeney, Buffalo.

For Rochester & Pittsburgh Coal Company: Charles O'Neill, New York city.

For North American Coal Corporation: H. P. Barnes, Buffalo.

For Anthracite Institute, New York city: Walter Gordon Merritt, New York city; John W. Simpson, 2d, New York city; Norman F. Patton, New York city; and also for New York State Retail Solid Fuel Merchants Ass'n, Albany, and for Rochester Coal Merchants Association.

For Delaware, Lackawanna & Western Railroad Company: Locke, Babcock, Hollister & Brown, by Evan Hollister, Buffalo.

For Lehigh Valley Railroad Company: Kenefick, Cooke, Mitchell, Bass & Letchworth, by William P. Stewart, Buffalo.

For Pennsylvania Railroad Company: Frank Rumsey and Percy R. Smith, Buffalo.

For Erie Railroad Company: J. P

Canny, Cleveland Ohio; Moot, Sprague, Marcy, Carr & Gulick, Buffalo.

For New York Central Railroad Company: Harris, Beach, Folger Bacon & Keating, by Paul Folger, Rochester.

For Baltimore & Ohio Railroad Company: Charles R. Webber, General Attorney, Baltimore, Md.; H. O. Bias, Traveling Coal Freight Agent, Buffalo.

For Pittsburg, Shawmut & Northern Railroad Company: P. B. McBride, Assistant to Receiver, St. Mary's, Pa.

For the city of Elmira: George G. Reynolds, Corporation Counsel for the city of Elmira, Elmira, and for the city of Ithaca.

For city of Auburn: L. N. Drummond, Corporation Counsel for the city of Auburn, Auburn.

For the city of Hornell: Leon F. Wheatley, Mayor of the city of Hornell, Hornell (by letter).

For the Public Service Commission: Sherman C. Ward, Assistant Counsel, Public Service Commission, Albany.

MALTBIE, Chairman: Commissioner Burritt has summarized the facts and presented very effectively the reasons why in his opinion the application in this case should be denied. He views the case from a broad, fundamental standpoint. It is natural that anyone familiar with the history of the natural gas industry in this country and the wasteful prodigality which has attended its operations should wish to conserve this natural resource and do everything in his power to see that it is utilized to the greatest advantage of the public in the future as well as at present. We have seen our natural resources wasted and destroyed because uncontrolled and unregulated "individual initiative" has disregarded future well-being in the effort to build up enormous personal fortunes. There is probably no industry or natural resource in which the utter failure of unrestrained individual enterprise operating under the *laissez faire* banner has been more completely demonstrated than in the natural gas industry.

There can be but one opinion among those who believe in the conservation of natural resources. They should be developed not to benefit a few individuals but in the interests of public welfare present and future. Our natural gas resources ought to be conserved and there is probably no field where the Federal government acting in the interests of the entire country and to protect the welfare of the future could accomplish more than in the natural gas industry. From a conservation viewpoint, I thoroughly agree with Commissioner Burritt, and if I could see how a denial of the present petition would work to this end, I would vote to refuse the application; but will such denial produce the desired results?

The field from which gas is to be taken by the petitioner is in northern Pennsylvania and southern New York. Apparently, far more of the gas will come from Pennsylvania than from New York and over the extraction of gas in the state of Pennsylvania, this Commission has practically no control. It is possible for Pennsylvania companies to take all of the gas

from this field unless the New York companies remove the gas before the field is exhausted.

Further, the Public Service Commission has been given no adequate authority to determine how the natural gas resources of this state, to say nothing of the resources of Pennsylvania, shall be developed. We have no powers directly to control the amount of gas that is taken from any field and our indirect powers are so limited that it is doubtful if much could be accomplished. The state of New York receives far more gas from sources located beyond its boundaries than it exports to any adjoining state and the conservation of natural gas resources in the various states cannot be properly brought about except through voluntary action of the states or by the Federal government. Neither one is yet operative and while attention has been given to electric interstate commerce, no effective steps have been taken to conserve or regulate the distribution of natural gas, where it is so urgently needed.

In view of the lack of authority conferred upon this Commission to conserve natural resources, the question becomes primarily what will be gained to consumers in the state of New York if the petition is denied. It is stated that about 80 or 90 per cent of the gas furnished by the petitioner will be used for industrial purposes and that only from 10 to 20 per cent will go to the general public, the inference being that the saving to the companies purchasing the gas will go to enrich a few stockholders. Let us assume such are the facts. Who will gain if those benefited by the petition are deprived of their profits or advantages by a denial of the petition? This Commission does not control the use that will be made of the gas from the field tapped by the petitioner. There are many other companies tapping the supply and we have no means of determining where, when, or to whom the gas will be sold. If restriction is imposed on the use of it in New York, it may go to Pennsylvania; and if the petitioner is not allowed to supply the areas which it is proposed to serve, the gas will go to other areas and there is no assurance that it will be used any more beneficially from a public viewpoint than it will be if the petition is granted.

As stated, I am heartily in favor of the conservation of natural gas as well as other natural resources; but in this specific case, will the granting or the denial of the petition work to the benefit of the people of New York? The benefit to the area to be supplied by the petitioner is definite, it is known, it is sure. But if the petition is denied, who will be benefited? There is no assurance upon this point. The answer is speculative and uncertain. There is nothing to assure us that the denial of the petition would conserve the gas supply. Is it not likely that the benefits would merely be diverted from one group or one locality to another?

There are many other subsidiary questions and elements which one might consider, such as the effects upon the coal companies, other utilities and particularly the Rochester Gas and Electric Company; but again, I see no way whereby the denial of the petition would ultimately work to conserve the coal supply or to the advantage of gas consumers in Rochester.

The gas in the field tapped by the petitioner will be used and wherever used it will naturally take the place of other fuel. Any attempted protection of any industry or of any area will either be ineffectual or merely transfer the effect elsewhere until a broad scheme of conservation is adopted.

Commissioner Lunn concurs filing memorandum dated September 15, 1936; Commissioner Brewster concurs.

LUNN, Commissioner, concurring: The question before the Commission for determination in this case is whether public convenience or necessity requires the construction of this gas line. Commissioner Burritt has set forth the facts in his memorandum and, based upon those facts, it is my judgment that a certificate should be issued to the petitioner.

The Pavilion Natural Gas Company, serving approximately 5,000 domestic consumers, requires this gas to reduce its production costs, and Commissioner Burritt concedes that the supplying of gas by petitioner to this distributing company would be in the public interest.

The Eastman Kodak Company requires this gas to reduce its operating costs. Gas should be conserved and used first for supplying the needs of domestic consumers, but it cannot be said that the use of gas to supply industrial needs which in turn supply employment to labor is not in the public interest provided the domestic consumer is not injured thereby.

Commissioner Burritt's judgment that the petition should not be granted is based upon his belief that natural gas from the New York and Pennsylvania fields should be conserved for the use of domestic consumers and should not be sold in such large quantities for low grade use as boiler fuel in industrial plants. I am in hearty accord with this desire, but I know of no way that this Commission can reserve the gas in the Pennsylvania fields for the sole use of domestic consumers or how we can prevent its being withdrawn by owners of gas well properties located in that state and sold for industrial use.

Natural gas, unlike solids, will not remain in the possession of the owner of the gas rights. If the adjoining owner or lessor drills and strikes gas, he can and will draw gas from the adjoining property. When one owner or lessor of gas rights strikes gas the adjoining owner must protect his property by offset wells. Gas storage is expensive, and when competition once starts to secure the available gas, an outlet for the production is bound to be found.

The New York Commission has no jurisdiction or control over the gas in the Pennsylvania fields and we cannot, by our decision in this case, impound it for domestic consumers in New York state.

Commissioner Burritt has set forth the testimony as to the known gas reserves in the fields from which it is proposed to draw gas to supply the Cabot Gas Corporation customers. He comes to the conclusion that known gas reserves are required to supply the future needs of domestic consumers. This may be true if no new fields are discovered. But can we, based upon past history and experience of natural gas production, conclude that new sources of supply will not be discov-

ered and developed? Even upon the testimony in the present case as to known reserves there is sufficient gas to supply all needs, including the Eastman Kodak Company contract, for more than five years and domestic consumers for years thereafter.

We can, by refusal to grant this petition, prevent the Cabot Gas Corporation from supplying the Eastman Kodak Company with gas for boiler fuel and the Pavilion Company with gas for domestic use, but we cannot thereby prevent others from withdrawing this gas for industrial sales and, in my judgment, that is likely to be the result.

I believe that sufficient basis has been shown in the record to justify and call for the issuing of a certificate of convenience and necessity, and I so recommend.

BURRITT, Commissioner, dissenting: This is a proposal to bring natural gas from Pennsylvania and southern New York in a 14-inch pipe line, 92 miles, through four western New York counties, to, but not into, the city of Rochester. It is intended primarily to supply industrial customers with natural gas, but it is also proposed to sell gas to domestic users in about half of the townships through which the line passes.

The granting of the petition is opposed by the Rochester Gas and Electric Corporation which fears present or eventual competition with its business in the city of Rochester and vicinity; by the coal companies whose business it is claimed will be injured by the introduction of a cheaper competitive fuel; and by the railroads which haul the coal which would probably be displaced to the extent of about 225,000 tons, under the contracts and proposals herein.

Seven full days of hearings were held at Buffalo on July 2nd and 3rd, on July 22nd, 23rd, and 24th, and August 3rd and 4th. The wide importance attached to the application and the extent of the opposition is indicated by the appearances and by the 1,712 pages of testimony, about equally divided between petitioner and opponents. Petitioner has presented twenty-three witnesses and 46 exhibits, of which 31 were received in evidence, in support of its application. On behalf of opponents seventeen witnesses testified and 45 exhibits were presented, of which 43 were received. Briefs were filed by the petitioner, Rochester Gas and Electric Corporation, Producers Gas Company, General Coal Company, seven railroads, and the three coal associations, on August 5th. Brief for the Pittsburgh Coal Company was not received until August 7th.

The petitioner, Cabot Gas Corporation, is a domestic corporation, incorporated under the Transportation Corporations Law on February 4, 1936. The purposes for which it was organized are, "to manufacture, to produce or otherwise acquire, and to supply for public use artificial or natural gas, or a mixture of both gases for light, heat, or power and for lighting the streets and public or private buildings of cities, villages, and towns in this state." Its principal office is in the city of Olean, Cattaraugus county, and a copy of its certificate has been filed in the office of the county clerk of that county. The authorized capital stock of the corporation is

$25,000, consisting of 250 shares of $100 par value each share. Its parent company is Godfrey L. Cabot, Inc., a Massachusetts corporation, which proposes to take all the securities which may be issued by the petitioner, so that none are to be sold to the public (S. M. 191).

The Godfrey L. Cabot corporation is said to have begun business in Pennsylvania in 1882 as a manufacturer of carbon black, which involves the production or purchase of natural gas. In 1900, the company built certain factories in West Virginia and later in Texas and Oklahoma. It is claimed to have become the third largest manufacturer of carbon black in the world. It is a large producer of natural gas, particularly in West Virginia, where it serves domestic, industrial, and wholesale customers. This company's business is said to be about equally divided between carbon black and natural gas, the former being somewhat greater. Mr. Cabot, the principal owner (all of the company's stock is owned by him and members of his immediate family) testified that he had been engaged in the natural gas business in one form or another for about fifty-three years.

The obvious motive behind this application is to find a suitable large and immediate market for the gas which the parent company of the petitioner has available from its leased acreage and gas wells in Pennsylvania and southern New York. The sponsor of the applicant, Godfrey L. Cabot, Inc., has 67,000 acres of leased land from which the daily open flow of gas is said to be 100,000,000 cubic feet. As stated by Mr. Cabot, the particular route of the proposed pipe line was chosen for the following reasons:

"First, because there was no other route running away from the fields of Potter and Tioga counties, and Allegany county, New York, that had so large an area that had absolutely no service of natural gas. Second, I was carrying gas over a region where coal was cheap, to a region where coal was less cheap. Third, because I was carrying gas through a community which any person passing through it by automobile could see was thrifty and fairly populous, and many industries. . . ."

The purpose of the application, therefore, though primarily to find a market for the gas owned by the interests controlling petitioner, is also to serve the territory with natural gas. Some of this territory now has no supply and some of it has an inadequate supply of this commodity. Mr. Cabot repeatedly stated that his company does not desire to distribute gas in territory where other public utilities are now serving, but to coöperate with these utilities by providing a cheap supply of gas to serve domestic consumers (S. M. 174, 177, 222, 239, 302, 859).

Local Consents

Local consents or franchises have been granted to the petitioner by nineteen towns in the four counties of Allegany, Wyoming, Livingston, and Monroe, through which it is proposed to construct a gas transmission line extending from the Pennsylvania state line in the town of Willing, Allegany county, to or adjacent to the western boundary line of the city of Rochester and the easterly line of the town

of Greece, Monroe county. The Kodak Park Works of the Eastman Kodak Company, where its principal manufacturing business is carried on, is located here, partially in the town of Greece and partially in the city of Rochester.

Although the proposed line passes near several sizable villages, it goes through none of them, and the petitioner has franchises in no villages. It is proposed to distribute and sell in eight of the towns through which the transmission line will pass, namely, Amity, Allen, Granger, and Hume, in Allegany county; Wheatland, Chili, Gates, and Greece, in the county of Monroe. In the other eleven towns, namely, Willing, Alma, Wellsville, Scio, and Angelica, in the county of Allegany; Genesee Falls, Castile, Perry, Covington, in the county of Wyoming; and York and Caledonia in the county of Livingston, the franchises provide for transmission only. A brief description of the franchises granted by these several towns, beginning at the northern end of the line, follows:

Town of Greece, Monroe county. Franchise granted June 3, 1936, gives permission to lay conductors for gas in the streets, highways, and public places of the town and to transport gas and to sell and deliver gas to any person or corporation. Besides the customary conditions as to the method of laying the mains, the franchise contains the further condition that the gas company, if permitted by the Public Service Commission, shall extend its mains to serve two or more customers on a single line to an average distance of 200 feet per customer, and shall sell gas for domestic use at rates equally favorable as the rates of other companies serving gas in such town, and shall sell gas from its high pressure main to single domestic consumers under such rules as the Public Service Commission may provide; provided, however, that the gas company shall not be required to duplicate the facilities to serve domestic consumers of the service of the company now serving the town where adequate service is provided.

Town of Gates, Monroe County. Franchise granted June 8, 1936, authorizes both the transmission and sale of gas under conditions similar to those contained in the franchise granted by the town of Greece.

Town of Chili, Monroe county. Franchise granted June 15, 1936, authorizes only the laying of conductors in the streets and public places of the town and the transporting of gas in such conductors, but it contains a condition to the effect that if permission be given by the Public Service Commission, it will serve gas to domestic consumers.

Town of Wheatland, Monroe county. Franchise granted June 2, 1936, authorizes the transportation and sale of gas in the town and contains similar conditions to those contained in the franchise from the town of Greece.

Town of Caledonia, Livingston county. Franchise granted June 1, 1936, authorizes only the transmission of gas through the town and contains customary conditions as to the method of construction.

Town of York, Livingston county. Franchise granted May 26, 1936, authorizes only the transmission of gas and contains customary conditions as to construction.

Town of Covington, Wyoming county. Franchise granted May 18, 1936, authorizes only the transmission of gas.

Town of Perry, Wyoming county. Franchise granted May 11, 1936, covers only the transmission of gas.

Town of Castile, Wyoming county. Franchise granted May 19, 1936, covers only the transportation of gas.

Town of Genesee Falls, Wyoming county. This franchise granted May 20, 1936, covers the transportation of gas only.

Town of Hume, Allegany county. Franchise granted May 10, 1936, covers the transportation, sale, and delivery of gas for any purpose.

Town of Granger, Allegany county. Franchise granted May 18, 1936, authorizes both the transportation and sale of gas in that town.

Town of Allen, Allegany county. Franchise granted May 26, 1936, authorizes both the transportation and sale of gas.

Town of Angelica, Allegany county. Franchise granted June 1, 1936, authorizes the transportation of gas only.

Town of Amity, Allegany county. Franchise granted May 25, 1936, authorizes both the transportation and sale of gas.

Town of Scio, Allegany county. Franchise granted May 23, 1936, authorizes the transportation of gas only.

Town of Wellsville, Allegany county. Franchise granted May 8, 1936, authorizes the transportation of gas only.

Town of Alma, Allegany county. Franchise granted May 18, 1936, authorizes the transportation of gas only.

Town of Willing, Allegany county. Franchise granted April 29, 1936, covers the transmission of gas only.

Utilities Affected

The proposed transmission line passes through the franchise territory of six operating public utility gas corporations, beginning at the Pennsylvania state line, as follows:

(1) Empire Gas and Fuel Company, Limited

(2) Producers Gas Company

(3) Iroquois Gas Corporation

(4) The Pavilion Natural Gas Company

(5) Tri-County Natural Gas Company

(6) Rochester Gas and Electric Corporation

(1) *Empire Gas and Fuel Company, Limited,* has franchises in the towns of Willing, Alma, Wellsville, and Scio, Wyoming county (Exhibit 30). However, since all of the franchises granted by this town to petitioner Cabot Gas Corporation are for transmission only, this corporation raised no objection to the granting of the petition.

(2) *Producers Gas Company* has a franchise in two of the towns through which the petitioner's transmission line will pass, namely, Amity and Angelica, Allegany county, and serves natural gas there. The Cabot Gas Corporation proposes to serve a large industrial customer in Amity, to which the Producers Gas Company objects.

(3) *Iroquois Gas Corporation* has franchises in the towns of Castile and Genesee Falls, Wyoming county. One

of its principal transmision lines, namely that in the Wayne-Dundee field, passes through these towns. It appeared at the hearing but raised no objection to the granting of the petition.

(4) *Pavilion Natural Gas Company* serves generally in Genesee and northern Wyoming counties. It has franchises in the towns of Perry, Covington, and York, where it serves mixed gas.

As will later appear, this corporation has made a contract with petitioner Cabot Gas Corporation for a supplemental supply of natural gas. This will be discussed in connection with this contract.

(5) *Tri-County Natural Gas Company* has a franchise in the town of Wheatland, Monroe county, and serves gas there. This company is controlled and supervised by the Rochester Gas and Electric Corporation (S. M. 772).

(6) *Rochester Gas and Electric Corporation* has franchises and serves manufactured gas in portions of the towns of Greece and Gates. It also has franchises in the towns of Wheatland, Ogden, and Caledonia, where it serves electricity but not gas. It appeared at the hearing and offered the principal opposition to the granting of the petition, as will later appear.

Financial Responsibility

Cabot Gas Corporation is a wholly owned subsidiary of Godfrey L. Cabot, Inc., which guarantees the financial responsibility of Cabot Gas Corporation. As yet the subsidiary company is merely a legal entity which owns little or no property, pending the authority asked for in this petition (S. M. 288–9). Since no balance sheet is yet available for this petitioner company, the parent, Godfrey L. Cabot, Inc., submitted balance sheets (Exhibits 3 and 4). The first of these, as of September 30, 1935 (Exhibit 3), was prepared by the company's auditing firm, Lybrand, Ross Brothers & Montgomery. The second (Exhibit 4) was prepared by the company's chief accountant, who appeared as a witness and explained the various items, and brings the balances in the various accounts down to December 31, 1935. A condensed summary of Exhibit 4 follows:

RE CABOT GAS CORPORATION

GODFREY L. CABOT, INC.

BALANCE SHEET AS AT DECEMBER 31, 1935

Assets

Current:			
Cash		$80,352.38	
Marketable securities at cost (aggregate market quotations at Dec. 31, 1935, $3,954,000)		2,398,401.74	
Notes and accounts receivable		1,529,847.75	
Advances to consignors, affiliated companies		996,359.94	
Other current assets including inventories		773,715.70	
Total Current Assets			$5,778,677.51
Investments at cost:			
Common stocks of affiliated companies		$2,790,887.26	
Other investments		133,191.80	
			2,924,079.06
Notes receivable (affiliated companies)			227,500.00
Other miscellaneous assets			278,371.00
Gas and oil properties and equipment:			
Land		$74,545.47	
Leaseholds and mineral rights	$1,701,373.68		
Less allowance for depletion	1,135,182.13		
		566,191.55	
All other (wells, pipe lines, equipment, etc.)	$5,380,482.41		
Less allowance for depreciation	3,446,522.54	1,933,959.87	2,574,696.89
Total Assets			$11,783,324.46

Liabilities

Current:			
Notes payable to affiliated companies		$371,121.57	
Accounts payable		542,799.28	
Customers' deposits—Gas accounts		20,173.80	
Advances from consignees		1,511,268.72	
Accrued taxes (W. Va.)		34,386.02	
Provision for Federal and Massachusetts taxes		162,078.53	
Total Current Liabilities			$2,641,827.92
Deferred profit from sale of gas and oil properties in notes receivable			475,720.14
Capital stock and surplus:			
Common stock, 1,600 shares without par value, authorized and issued		$3,285,075.20	
Earned surplus—Surplus as per books		4,511,202.80	
Development costs less accrued depreciation not included in net assets in the books (A)		600,641.18	
Excess of deferred profit in the books over amount in this statement on account of development costs written off in books prior to sale of property		268,857.22	
Total capital stock and surplus			8,665,776.40
Total Liabilities			$11,783,324.46

NOTE A.—Expenditures for gas and oil well development in use at December 31, 1935, are included among the assets herein at cost, $1,827,319.66, less an adequate allowance for accrued depreciation, $1,226,678.48, or a net amount of $600,641.18 which does not appear among net assets in the books of account because it has been written off as an expense in accordance with the procedure under Federal income tax regulations.

Mr. James S. Kennedy, chief accountant for Godfrey L. Cabot, Inc., testified (S. M. 97–9) that the item, Common stocks of affiliated companies—$2,790,887.26, represented cost to Godfrey L. Cabot, Inc., at par value of the stock of subsidiaries, the majority of which were carbon black manufacturing companies with plants located in Texas and Oklahoma. It

included the stock of the Wack Company, a distributor of natural gas in West Virginia, but did not include the stock of Cabot Gas Corporation, the petitioner in this proceeding, as no stock had been issued by that corporation as yet.

Gas and oil properties and equipment owned by Godfrey L. Cabot, Inc., as at December 31, 1935, are shown in the balance sheet (Exhibit 4) at cost with deductions for depletion and depreciation. At that date cost less allowances for depletion and depreciation was $2,574,696.89. These properties are located in New York, Pennsylvania, and West Virginia, but mostly in West Virginia (S.M. 1123). At the request of opponents the witness prepared and submitted a statement showing the cost of the properties located in New York and Pennsylvania at both December 31, 1935, and June 30, 1936 (Exhibit 55). The following table shows the investment at cost without deductions for depletion and depreciation at June 30, 1936:

	New York	Pennsylvania
Leaseholds and mineral rights	$96,018.09	$30,834.06
Gas and oil well construction and equipment	76,301.27	138,197.58
Pipe lines	27,476.55	96,862.72
Buildings	251.66	.....
Machinery and equipment	11,442.28	6,910.94
Rights of way	1,136.68	3,045.77
Totals	$212,626.53	$275,851.07

The comparable totals at December 31, 1935, were $169,941.14 and $124,080 for the properties located in New York and Pennsylvania, respectively.

Probable Cost and Earnings of Line

Mr. Burdette, a construction superintendent for Godfrey L. Cabot, Inc., with considerable experience in similar work, appearing as a witness for the petitioner, estimated the cost of construction of the 92 miles of 14-inch pipe line from the state line to the Rochester city line at $16,500 per mile, or a total of $1,518,000. The basis of this estimate in unit costs was set forth in Exhibit 2, and in his testimony (S.M. 35–6), which was as follows:

A. Cost of the pipe was $186.39 per hundred feet; couplings, $14.20 per hundred feet; cost of right of way, $6 per hundred feet; estimated cost of all labor for constructing lines, $75 per hundred feet. I took 10 per cent of the total cost of the figures, which I have just read, and which equals $28.16 per hundred feet, for overhead, making a total cost of—per hundred feet line, of $309.75, or $16,355 per mile.

Q. Now, with regard to the figure which you used, you rounded it out to $16,500? *A.* That is correct.

Q. With regard to the prices of material, is it your opinion that these are fair and reasonable prices, and the material may be delivered on the job at that price today? *A.* That is correct.

Q. With regard to your price for labor, did you submit the figure for labor to an operating contractor whose business it is to build gas lines? *A.* I have.

This company estimate was supported by a contractor who testified that he has been engaged in the business of constructing oil and pipe lines for twenty-three years and that he has built hundreds of miles of line all over the United States, including the

100-mile line from the state line to Syracuse. He particularly checked the estimate for labor, and testified that a cost of $16,500 per mile complete for this line in this particular type of territory was, in his opinion, reasonable. He had not estimated it in detail for a bid however.

Another witness for the petitioner, Mr. Willard F. Hine, a public utility engineer, also testified that he had studied the estimate of the costs of this proposed line but made no specific estimates and that, in his opinion, the estimates are reasonable and check up very closely with the cost of transmission lines of the same size and general character (S.M. 574–5).

Organization expenses of the petitioner Cabot Gas Corporation are estimated to be $50,000 made up as follows: Engineering, accounting, and geological expenses, $15,000; fees and taxes, $3,000; legal fees, hearings, court proceedings, opinions, etc., $25,000; and other incidental expenses, $7,000. Witness Hine gave it as his opinion that this estimate "ought to be adequate" (S.M. 602).

Other investment costs are the items referred to in the contracts with Eastman Kodak Company and Pavilion Natural Gas Company, and spur connections with other industrial customers. A summary from Exhibit 10 follows:

Estimated Investment

92 miles @ $16,500 per mile complete (state line—Kodak Park)	$1,518,000
Organization expenses	50,000
Cost of facilities at Eastman Kodak plant	130,000
Cost of line to Pavilion Natural Gas Company (5 miles of 6-inch, @ $6,000 per mile, complete)	30,000
Other spur lines	10,000
Total investment	$1,738,000

Estimated Income

The principal sources of income are expected to be from the Eastman and Pavilion contracts, which together will take 71.2 per cent of the gas estimated to be sold and provide 69.8 per cent of the estimated operating revenues. There are four other possible industrial contracts of some size not yet negotiated. No estimates are made for sales to and receipts from individual domestic consumers, but a large proportion of the expected sales to Pavilion Natural Gas Company will go to domestic customers.

Contract with Eastman Kodak Company of Rochester.

On April 7, 1936, Godfrey L. Cabot, Inc., entered into a contract (Exhibit 5) with Eastman Kodak Company for a supply of natural gas from its gas wells and gas acreage in the southwestern part of New York state and the northern part of Pennsylvania. The estimated maximum requirements provided for in this contract are 1,200,000 cubic feet hourly, 25,000,000 cubic feet daily, and 5,500,000,000 cubic feet yearly. The gas is to have a heat value of not less than 1,000 B.T.U. and to be delivered at a minimum of 35 pounds and a maximum of 40 pounds pressure per square inch at a temperature of 60° Fahrenheit and a barometric pressure of 29.3. The contract is for a 3-year period from the date on which delivery of gas is begun.

By the terms of an agreement (Exhibit 6) dated June 29, 1936, this contract was transferred from Godfrey L. Cabot, Inc., to Cabot Gas Corporation for a consideration of $1. *The agreement provides for the guar-*

anty by Godfrey L. Cabot, Inc., of the performance of all obligations of Cabot Gas Corporation under said contract. The price of the gas to be furnished under the contract during each month is to be based upon the average cost per net ton of 2,000 pounds (f.o.b. cars Rochester, N. Y.) of bituminous coal received by Rochester Gas and Electric Corporation for steam generating purposes during the previous month, in accordance with a table attached to the contract. Based on the figures in the table the price for the gas would average about 14 cents per thousand cubic feet (13.285 cents at a base price of coal between $3.85 and $3.95 per net ton).

Eastman Kodak Company, vendee, proposes to use the natural gas thus purchased for the firing of all of its present 11 steam power boilers of over 200 pounds pressure and for other industrial and steam generating purposes as far as economically feasible, together with incidental uses such as laboratories, cafeteria, etc. For the latter incidental use Kodak now buys manufactured gas from the Rochester Gas and Electric Corporation, the quantity so bought for the twelve months (June, 1935—May, 1936) being reported as 15,565 thousand cubic feet, costing $7,962.93, or at a net average rate of 51.2 cents (Exhibit 24). Vendee agrees to equip its plant for the exclusive use of such natural gas. It was estimated by the general manager of the Kodak Park plant, who appeared as a witness, that approximately 170,000 tons of bituminous coal would be replaced by this contract at a saving to the Eastman Company of approximately $75,000 per year for a period of three years (S.M. 153).

The vendor company agrees to substantially reimburse the vendee for the expenses of converting its fuel burning equipment, estimated at $130,000. This will be done in part by a cash payment of $65,000, forty days prior to the completion of its pipe line, and in part by a credit of 5½ cents per 1,000,000 B.T.U. if the delivery of the first supply occurs in the winter, on all gas delivered between December 1st and March 31st, inclusive, for five months thereafter, and the same amount for four months if delivery is begun between April 1st and November 30th.

The vendor agrees to complete its transmission line ready to deliver gas not later than June 1, 1937, "conditional upon vendor being able to secure all necessary franchises, rights of way, certificates of public convenience, or other permits necessary" within six months, and subject to any agreed upon extension. For failure to carry out its obligations, except because of "force majeure" (paragraph 13 of contract), the vendor accepts liabilities for expenditures of vendee on account of this contract, up to not exceeding $500,000.

Contract with Pavilion Natural Gas Company.

On July 2, 1936, Cabot Gas Corporation entered into a 5-year contract (Exhibit 7) with the Pavilion Natural Gas Company to supply all of the Pavilion Company's requirements for natural gas in excess of the amount produced by Pavilion's pres-

ent wells. This will enable Pavilion to close down its gas manufacturing plant and to effect a saving in production costs estimated by President White of that company at $10,000 per year (S.M. 334), to insure its supply of gas, and probably largely to increase its business. This contract sets forth that when Cabot has secured the necessary authority and has completed its proposed pipe line to Rochester, it will construct a branch pipe line from its Rochester line to Pavilion's plant at Pavilion, and that Cabot and Pavilion will coöperate in serving gas for fuel to industrial concerns in Pavilion's territory. Pavilion's maximum requirements for its 5,000 customers are estimated in the contract to be not in excess of 2,000,000 cubic feet per day. The prices to be paid by Pavilion for the gas are: 25 cents per thousand cubic feet for the first 181,000,000 cubic feet sold during each six months' period from November 1st through April 30th; 16 cents per thousand cubic feet for all gas sold in excess of 181,000,000 cubic feet during each six months' period from November 1st through April 30th; 25 cents per thousand cubic feet for the first 92,500,000 cubic feet sold during each six months' period from May 1st to October 31st; and 16 cents per thousand cubic feet for all gas sold in excess of 92,500,000 cubic feet during each six months' period from May 1st to October 31st. As Pavilion now sells mixed and natural gas, it is apparently anticipated that it will not be necessary to change its equipment (S.M. 335). No provision is made in the contract for Cabot to pay any such costs.

A statement of the company's estimated annual operating revenues (Exhibit 10) follows:

	Consumption M cu. ft.	Receipts
Eastman Kodak Company (based on coal @ $3.89 per ton, equals 0.13285)	5,000,000	$664,250
Pavilion Natural Gas Company	533,500	109,975
Other proposed industrial contracts (4)	1,685,000	247,810
Other wholesale	550,000	88,000
Total	7,768,500	$1,110,035

The prices at which it is proposed to sell gas to the other industrial users range from an average of 14 cents per thousand cubic feet for the largest to about 16 cents per thousand cubic feet for the user with the smallest estimated requirements.

Practically all of the gas purchased by Eastman Kodak Company,—laboratory, cafeteria, and other incidental use excepted,—will be used under boilers to generate steam. This is also true of the other four proposed industrial contracts. Mr. Cabot admitted that 90 to 95 per cent of the initial sales in sight would be used for low grade industrial purposes, mostly boiler fuel (S.M. 862). The Eastman contract alone accounts for nearly 65 per cent of the total initial sales. Mr. Cabot expects the proportion of domestic sales to increase gradually over a period of years from 5 or 10 per cent to perhaps as much as 40 per cent (S.M. 857).

Estimated Operating Expenses

Operating expenses were estimated by witness Burdette (S.M. 497) in collaboration with other witnesses for the company, and are shown in Exhibit 10, as follows:

Line operation	$10,000
Repairs and maintenance	10,000
Miscellaneous and general	10,000
Amortization (20% based on minimum life of five years)	347,600
Taxes	30,000
Cost of gas (7,850,000 M @ 7¢ per M)	549,500
	$957,100

The estimates for line operation, repairs and maintenance, and miscellaneous and general, generally were considered reasonable by these witnesses, considering the length of the line and the character of service to be rendered, although some of them believed that the estimate for repairs and maintenance was a little high.

The claim for amortization is based on a minimum life of five years and "paying out" in three years; that is, the investment in the line would be recovered in three years. Witness Hine testified that five years would be a very short time, and that therefore the amortization is undoubtedly a high figure (S.M. 577). Mr. Cabot testified that the company would have at least twenty years to amortize the line and probably a great deal more than that, but he thought that it should get back the cost of the line in not less than three years and not more than five, depending on the load (S.M. 285).

The $30,000 figure for taxes is largely an estimate. The witnesses admitted that it was very difficult to estimate the amount for taxes, but felt that such an allowance based on the assumption set forth in Exhibit 10 would be somewhere within the range.

The price for gas to be purchased by the petitioner from Godfrey L. Cabot, Inc., is 7 cents per thousand cubic feet, as provided for by contract made July 21, 1936 (Exhibit 28). Clause 6 of that contract reads as follows:

"This contract shall continue for a term of three years from the date when deliveries into said line commence, and shall be renewed from time to time with a price adjustment based on the field price plus a reasonable charge for carrying to the point of delivery."

Mr. Cabot testified that this 7-cent price was fixed by taking into consideration that Godfrey L. Cabot, Inc., was paying 5 cents in the field for purchased gas, and that 1 cent per thousand cubic feet would be a reasonable charge for the first few years before gas had to be pumped and another cent was a reasonable allowance for amortization of the necessary pipe lines (S.M. 856). Mr. Cabot further testified that this 7-cent price would not be increased in any event for at least three years, and that he thought it was a just and reasonable price for Godfrey L. Cabot, Inc., to receive for the gas at the state line.

Summarizing the foregoing operating income data for this proposed project, we have (Exhibit 10)

Estimated operating income	$1,110,035
Estimated operating expenses	957,100
Estimated net income	$152,935

This is equivalent to 8.8 per cent return on the estimated investment of $1,738,000.

This is the petitioner's claim supported by testimony. Although it was attacked at several points and minor errors in estimating developed, it appears to represent substantially what might be expected as an operating result, allowing for a 5-year amortization. For example, the income

expected to be received from Pavilion appears to be much too high. It seems probable that taxes, including income taxes, would be at least double the estimates. But even after making these and other necessary adjustments, the general result—a substantial probable net earning—would not be changed.

Source of Supply

The adequacy of the source of supply of natural gas, which is generally deep well pools in the Oriskany sand in southern New York and northern Pennsylvania, was the subject of much testimony and considerable difference of expert opinion of geologists and drillers, appearing as witnesses. Their testimony, and the exhibits, included rather complete data on the geology of the Oriskany gas-bearing sands of the region, a review of drilling results and experience, and expert opinion on gas reserves and probable future supply. It substantially brings down to date the Commission's natural gas investigation and the report made January 12, 1932. In some respects the testimony and exhibits are even more complete and comprehensive than in that investigation, due to recent extensive developments in the gas fields and the accumulation of data.

The petitioner presented three witnesses, Messrs. Cabot, Whorton, and Dixon, all graduate geologists with considerable experience in the geology of gas and oil-bearing strata, to show the location, character, and probable supply of gas on which the petitioner relies to furnish the gas proposed to be transported and sold. Mr. Cabot was his own principal witness. He testified that he has been a student of the geology, physics, and chemistry of gas for nearly sixty years and that he has visited and studied the geology of gas fields on four continents and in practically all the many fields in the United States. He states that he has made special studies of Oriskany sands in Pennsylvania (S.M. 178) and West Virginia.

Mr. Whorton is a geologist now employed by Godfrey L. Cabot, Inc., with ten years' experience in geological field work, locating and studying gas-bearing structures. Since 1931 he has been giving particular attention to the structures in which Oriskany sand is found and to the production of gas in those areas. Mr. Dixon is a consulting oil and gas engineer and gelogist, a member of the firm of Brokaw, Dixon & McKee of New York, which also does engineering and construction of pipe lines, management, and valuation work. He has had sixteen years of experience in practically all the gas fields in the United States and has made many estimates of gas reserves. He has worked in most of the gas fields where Godfrey L. Cabot, Inc., has gas leaseholds and wells.

In rebuttal, the opposition also presented three witnesses, Messrs. Fralich, Brewster, and Davis. Mr. Fralich is a geologist and petroleum engineer and member of Torrey, Fralich & Simmons, Ltd., geologists and consulting engineers of Bradford, Pa. He has made special studies on the behavior of fluids in underground reservoirs for the Bureau of Mines and at the Colorado School of Mines. Since 1929 he has specialized in the Pennsylvania and New York

fields and has been extensively engaged in mapping the surface and subsurface geology, estimating the reserves, and otherwise studying the factors associated with production of Oriskany sand gas in those fields. In addition, he has had rather extensive experience in making core analyses and in conducting seismograph surveys.

Mr. Brewster has had experience in the natural gas business since 1908 and has had extensive experience in drilling and producing gas and oil throughout the United States. Since 1928 he has been general manager of the Belmont Quadrangle Drilling Corporation, producers of natural gas, with considerable acreage and 60 producing wells in the southern New York-northern Pennsylvania region. That corporation, he stated, geologized and developed the first Oriskany gas field in that region at Dundee, N. Y., and for the past six years has studied and developed Oriskany production intensely.

Mr. Davis is a consulting engineer and geologist with thirty years' experience and has appeared frequently before courts and Commissions. Since 1920 his practice has been almost entirely petroleum and natural gas geology and engineering in connection with the development of oil and gas fields, designing and construction of pipe lines, and estimating gas reserves. During the past ten or twelve years he has made a number of studies of the southern New York and northern Pennsylvania natural gas fields.

The Oriskany sand horizon in southern New York and northern Pennsylvania is the one principally relied upon by most New York state cities and villages using natural gas, as well as many in Pennsylvania. It is also Cabot's only source of supply for the proposed line. This gas-producing horizon underlies the northeastern portion of the great Appalachian gas field. This region is a great geo-syncline or canoe-shaped basin extending northeasterly from eastern Kentucky to southern New York. The Oriskany horizon outcrops at its northernmost limit at Oriskany Falls. The proven productive areas of the Oriskany sand are located in southern New York and northern Pennsylvania, and in West Virginia, although it seems probable that these sands more or less underlie the area between. (Exhibits 8, 12, 56, 83, and 84.) Fralich's opinion regarding the possibilities of obtaining gas in large quantities from this area is that while that area may be productive, the experience so far has not given it a very great possibility (S.M. 1222–3). The area has been very well prospected and has become quite well defined by the drilling of dry holes as well as productive wells. (S.M. 1150).

The Oriskany sand, where it exists (it does not exist in some places), lies at a depth of about 1,500 feet below sea level in southern New York, gradually dipping southward to a depth of over 6,000 feet in southern Pennsylvania, from whence it rises again to a depth of about 2,000 feet below sea level in West Virginia. It is about 1,200 to 1,400 feet above the Medina horizon. The Oriskany horizon undoubtedly contains many unproductive areas.

The principal characteristics of the

Oriskany sand as a natural gas medium are (1) its porosity, or the capacity of a given area to contain gas; (2) its thickness or extent in depth; (3) its permeability, which measures the ease and rapidity of movement of gas through and out of it; and (4) the practically uniform presence of salt water at the edges. Since calculations of the amounts of gas obtainable from a pool are based chiefly on the porosity, thickness, and permeability of the sand, reliable knowledge of these factors becomes very important. Of course, when such calculations have been checked by the experience of production from drilled wells, they may be more definitely relied upon.

The porosity of Oriskany sand is relatively high, although it is difficult to get an exact measurement because the sand is so loosely cemented that it disintegrates rapidly when a well is drilled into it and blows out as dust. Pieces of the tighter portions recovered show a porosity of 12 per cent, and Fralich thought that looser sections may have as much as 20 per cent, although these are usually quite thin. This characteristic is in striking contrast to the Medina sands which are more compact and give up their gas more slowly (S.M. 384–5) and makes the Oriskany sand one most likely to yield large supplies of natural gas (S.M. 1171), especially where the sand is thickest.

The thickness of this sand varies from a trace to 60 feet or more. Davis said it might even be 100 feet thick in places. However, ordinarily not more than one third of the total thickness, usually the upper part, is found productive. The witnesses substantially agreed that the probable usual thickness of Oriskany sand in most productive fields is from 15 to 20 or 30 feet.

Oriskany sand is very permeable and gives up its gas readily. This accounts for the large open flow of wells especially at the outset. This is no measure of productive capacity of the wells or the size of the reserves,—but does make possible the depleting of gas fields in a relatively short time (S.M. 1182). At first, pressure tends to decline rapidly after wells are drilled into pools, but later may rise again, especially if the wells are shut in.

The origin of natural gas in Oriskany sands in this area being from organic or animal material laid down under water (S.M. 187–8) a characteristic accompaniment seems to be salt water around the edges of the gas pool. As gas is withdrawn and pressure released the salt water follows the gas toward the wells and tends to maintain pressure within limits. It also partly determines the rapidity with which gas may be withdrawn from a pool. If a well is near the edge, it may be flooded and spoiled by the salt water. Davis estimated that the range of the rate of withdrawal according to the size of the pool and the location of the well should be between 5 and 25 per cent (S.M. 1602–3).

The witnesses Whorton and Fralich testified that there are at least eight major gas fields or gas-producing areas in the northern Oriskany sand horizon in northern Pennsylvania and southern New York, some with two or more pools. They named these as follows: (1) Wayne-Dundee, two

pools; (2) Tioga, or Farmington, two or more pools; (3) Hebron; (4) Ellisburg; (5) State Line, or Willing (Stone Dam), probably two pools; (6) Greenwood, two or more pools; (7) Sabinsville; and (8) Harrison.

The principal producing companies with pipe lines in these fields are:

The Belmont Quadrangle Drilling Corporation

Empire Gas and Fuel Company, Ltd.

New York State Natural Gas Company

North Branch Development Company and affiliates

North Penn Gas Company and affiliates.

United Natural Gas Company and affiliates

Godfrey L. Cabot, Inc.

In addition, there are other gas producers in the area and there may be some minor pipe lines (S.M. 346; Exhibits 64 and 87).

The Godfrey L. Cabot, Inc., leaseholds and wells in these fields are shown in detail on the map which is Exhibit 8. The acreage leased in New York state is 45,635.7 acres, but this includes 9,559 acres of Medina, leaving 36,076 acres in Oriskany. In Pennsylvania, this corporation has 19,847 acres under lease and owns 1,900.6 acres in fee. Thus its total controlled gas acreage in both states is 67,383.3 acres.

Witness Fralich analyzed the undeveloped lease holdings of Godfrey L. Cabot, Inc., in the New York-Pennsylvania region as follows (Exhibit 66):

	Acreage in Pennsylvania Oriskany production	Acreage in New York Oriskany production	Acreage in New York Medina area
Total proven acreage	282	243	...
Total favorable acreage	169	361	(a)
Total unfavorable acreage	18,571	34,585	(a)
Acreage in Kinzua township under test	759.5	....	...
Totals	19,781.5	35,189	9,462

(a) Indeterminable except by drilling.

According to this witness, Godfrey L. Cabot, Inc., has 770 acres in productive acreage (Exhibit 65) in addition to the above 64,432.5 acres in undeveloped acreage, or a total controlled acreage of 65,202.5 acres.

Godfrey L. Cabot, Inc., also owns or has under contract eight producing wells in the following fields (Exhibit 8):

Field	Wells owned	Wells under contract
Hebron	2	0
Sabinsville	1	1
Ellisburg	1	1
State Line	2	0
Total	6	2

Mr. Thomas R. Adams, president of the Williamsport Natural Gas Company, appearing as a witness for the petitioner, testified that his company has a 3-year contract with Godfrey L. Cabot, Inc. (Exhibit 9), who takes gas from one of his wells in the Ellisburg pool. This contract provides for the sale to Cabot of 1½ million minimum and 10 million maximum cubic feet per day at a price of

5 cents per thousand cubic feet. The shut-in rock pressure on this well was 1,785 when it came in on August 5, 1935, and today is 1,485. Mr. Adams thinks this well will last five years (S.M. 120).

Mr. Chris S. Knaur owns the Wyoga Gas Company, which has producing wells in Hebron and State Line (Willing township) field. He testified that he had a well with an open flow of 20 million cubic feet daily in the latter field, from which he had offered to sell gas to Mr. Cabot and desired to enter into a contract.

Witness Whorton testified that his company was drilling six wells in the above-named field, all of which he believed were in proven territory with the possible exception of one. In addition, there are seven producing wells with an initial production of 166,362 thousand cubic feet in these fields, owned by independent operators, which gas is presently available and not contracted and has been offered to his company. These and other independent operators own 1,382.8 acres in these fields on some of which no wells have been drilled as yet, but which is in what he considers proven acreage. He feels sure that many of these leases would be drilled immediately if there were any market for the gas after the leases were drilled (S.M. 477–9 and Exhibit 20).

Whorton testified also as to the Kinzua well which had recently come in and was estimated at one time as making a million cubic feet. This well is located in the vicinity of Warren, Pa., about 50 miles west of the nearest Oriskany gas field, in what was considered unproven territory. Witness Fralich did not include the Warren county (Pennsylvania) area, where the Kinzua well is located, in his list of proven fields (Exhibit 64). He believes that that well is an isolated well and does not think that it can be classified as a commercial well. It is his opinion that the well is either at the very edge of the field or represents a very small pocket because, after blowing open for a short time, naphtha is now coming out of it (S.M. 1219–21).

Witness Whorton stated that, including producing wells under contract, the open flow production of the producing wells controlled by Godfrey L. Cabot, Inc., is slightly over 100 million cubic feet per day. Of this about 70 million is from owned wells and 30 million from a contract well. Mr. Cabot also testified (S.M. 196):

"We have at present over a hundred million feet open flow capacity at disposal at the present time. We are drilling five wells of which one is expected in very shortly. All of them are in defined territory, or nearly defined. I think one of them is not, perhaps, entirely within the defined territory, and we expect within six months to have two hundred million feet of flow capacity to dispose of. We are going to start two wells in the very near future."

The petitioner did not furnish any definite estimates of reserves, either in the four fields from which he expects to draw his supply, or for the region as a whole. He chose rather to rely on expectations that large quantities of gas would be found. His witnesses, basing their opinions on past experience, stated that there are not only large reserves in proven acreage, but freely predicted that new

gas-bearing structures and fields will be discovered and utilized.

Mr. Cabot testified that in his opinion calculations commonly used, based on initial decline in a field, "would be enormously under the mark" (S.M. 183). He thinks that the Oriskany sand will produce a great deal more gas than is ordinarily calculated by geologists (S.M.184). The witness Dixon confirmed this view. He believes that "it is practically certain that new fields will be brought in on the known favorable areas in this region" (S.M. 369); "that it is highly probable that during the next five years there will be sufficient drilling and sufficient discoveries so that the reserves will not be greatly diminished, and possibly greatly increased . . . drilling keeps on as the reserves are depleted and the reserves are therefore kept up" (S.M. 370).

Mr. Dixon, who has estimated the proven gas reserves of the Tioga, Hebron, State Line, and Ellisburg fields, concluded that there will be sufficient gas in these fields to last at least five years or more, to supply all the present probable markets (S.M. 367–8). Mr. Cabot thinks that his company has sufficient gas to take care of Eastman Kodak Company for five years (the contract obligation is only for three years) and after that to supply domestic consumers and such industries as the glass makers, who must have gas, "for a generation" (S.M. 197). Whorton was more conservative, but in general confirms these opinions.

Opponents' witnesses also admitted that new fields would undoubtedly be discovered and that there would be available gas. Davis estimated the total reserves in the whole Appalachian area are more than five trillion cubic feet, of which, however, those in southern New York and northern Pennsylvania are only about 3 per cent (S.M. 1663).

Mr. Fralich was positive that the last gas field in the Oriskany sand had not been discovered and gave as his opinion that there is no doubt whatever that the most favorable area in this particular region in which to prospect for Oriskany gas companies Allegany county, New York, and Tioga and Potter counties, Pa. (S.M. 1396–7). His reason for that conclusion is that every well which has been drilled in the particular area which he had in mind has encountered Oriskany sand that has contained either salt water or gas, and that the area also includes about fourteen undrilled structures. He thinks that there will be gas under a certain number of them, but did not know under how many; nor did he know what the reserves would be in those undrilled structures, because the structures are very small and apparently the reserves will be less per field than the fields that have been discovered in the past (S.M. 1229–31).

Opponents' witnesses were more definite. Witness Fralich testified that in his opinion it is possible to estimate the gas reserves in each of these proven New York and Pennsylvania Oriskany fields with reasonable accuracy and thereby get the total gas reserves in that area. His estimate, which he believes fairly represents the volume of gas that remains to be recovered from the present Oriskany fields as of May 1, 1936, to a pressure of 14.4 pounds to the square inch ab-

solute, is 144,335,246 thousand cubic feet. The method used by him was the pressure volume method corrected for deviation from Boyle's Law, and for contraction of reservoir volume by water encroachment.

Estimates of the reserves in these Oriskany gas fields were also made by witnesses Brewster and Davis (Exhibits 69 and 87). Brewster estimated the reserves for all fields except Harrison and Sabinsville at 87,082,617 thousand cubic feet as of May 1, 1936, without correction. Davis' estimate totaled 154,270,000 thousand cubic feet as of January 1, 1936 [if we deduct his figure of 14,888,000 thousand cubic feet for gas produced during the first four months of 1936 (Exhibit 86) we get an estimate of 139,382,000 thousand cubic feet as of May 1, 1936]. The record does not show whether or not Davis' estimates were corrected for deviation from Boyle's Law and for contraction of reservoir volume by water encroachment.

The following table shows the gas reserves estimated by these three witnesses for the opposition for the four fields from which Godfrey L. Cabot, Inc., proposes to supply gas to the petitioner:

Field	Fralich (Exhibit 64) as of May 1, 1936	Brewster (Exhibit 69) as of May 1, 1936*	Davis (Exhibit 87) as of Jan. 1, 1936*
	M cu. ft.	M cu. ft.	M cu. ft.
Hebron	5,686,678	9,707,840	6,200,000
Ellisburg	19,936,380	29,814,555	30,270,000
State line (Willing)	22,546,414	31,069,277	34,000,000
Totals (exclusive of Sabinsville)	48,169,472	70,591,672	70,470,000
Sabinsville	20,992,000	(Not estimated)	25,000,000
Totals (including Sabinsville)	69,161,472	.....	95,470,000

*Without correction for deviation from Boyle's Law or for contraction of reservoir from water encroachment.

Property maps of these and the other major fields in southern New York and northern Pennsylvania show the productive limits, the wells drilled, and the ownership of the various tracts (Fralich, Exhibits 57–63).

Witness Fralich also gave figures for withdrawals of gas from these proven New York and Pennsylvania Oriskany fields (Exhibit 64). At the present time the rate of withdrawals from these fields is about 35 billion cubic feet per year, with which Davis agrees. At this rate of withdrawal he figures that the total reserves now in sight, as estimated by him (144,335,246 thousand cubic feet) would last a little over four years, providing it were possible to produce the fields at that rate of production, which he claims it is not, because the rate of production from a well or from a field is the function of the rock pressure, and as the rock pressure declines the productivity of the well or field also declines.

He testified further that if the load that is proposed to be sold to the Cabot Gas Corporation were added to the present withdrawals, the life of the known reserves would be reduced from a little over four years to about three and one-half years, providing

all the gas could be taken out in that time. In arriving at these life figures the witness gave no consideration to the possibility or probability of an increase in the existing withdrawals, although he believed that the tendency would be that the withdrawals by existing companies would increase.

Other tabulations were presented by witness Fralich to indicate Cabot's portion of the present estimated reserves on an equitable withdrawal basis (Exhibit 65). The apportionment of the total reserves was made for each of the four fields from which Cabot proposes to supply gas to the petitioner on the basis of productive acreage and shows a total of 4,738,940 thousand cubic feet applicable to Cabot's acreage and a total of 6,617,901 thousand cubic feet, applicable to the combined acreage of Cabot and the independent operators whose gas is available to Cabot. In presenting these tabulations, this witness stated that he did not know of any instance where a company having such a small amount of acreage has contemplated the withdrawal of such a large volume of gas (S.M. 1228). This theoretical proration, however, is of little value since it was admitted that proration is neither generally practiced nor practicable in this area under present conditions.

The opposition attempted to show that it was not possible to sell gas from these fields at the state line at 7 cents and meet the cost of production and delivery. Its principal witness on this subject was Mr. Brewster, who testified about the production costs of The Belmont Quadrangle Drilling Corporation, which operates in most of the eight major Oriskany gas fields, including two of the fields from which the petitioner proposes to obtain its supply (Exhibit 67). These costs for the two fields referred to, varied from 10 cents per thousand cubic feet in the Willing (State Line) field in 1936 (six months) to 25.7 cents per thousand cubic feet in the Hebron field in 1933; while the average cost for all fields varied from 13.3 cents per thousand cubic feet in 1936 (six months) to 34.8 cents per thousand cubic feet in 1931. However, it was pointed out that as there are so many factors involved in production cost, the experience of one company might be entirely different from that of another. For example, production cost per unit of sales would be lower if more gas were sold or if less dollars were spent for development costs and lease rentals. Further, the method of accounting for development costs would affect materially the unit cost of production. Detailed costs of other producers in these fields, including those of Godfrey L. Cabot, Inc., were not presented. In any event, the production costs of The Belmont Quadrangle Drilling Corporation cannot be said to represent Cabot's cost.

On the other hand, Godfrey L. Cabot, Inc., presented evidence that it has already under contract the purchase of 1½ million to 10 million cubic feet per day at 5 cents per thousand cubic feet and that there were other independent operators in these fields who desired to contract their supply at that price (*supra*).

Summarizing the evidence on the source of supply, it appears that the known reserves based on proven

fields are in the neighborhood of 150,000,000 thousand cubic feet; that at the present rate of withdrawal of 35,000,000 thousand cubic feet yearly this supply will last only a little more than four years; and that accelerated withdrawal is likely, so that it is quite probable that known reserves will not last even that long. Opponents base their contentions on these facts and give little or no consideration to future discoveries and developments.

Petitioner's witnesses have shown, however, that Cabot has the gas in his own wells or leased from others who have gas to sell for at least a 5-year supply, providing the fields are not sooner exhausted, and the opponents have not successfully shown that this is not the fact. Against the possibility of exhaustion of known fields, Cabot relies on what he regards as the certain opening of new sources not yet discovered. Opponents point out that in order to furnish a 5-year supply from known sources Cabot must take more than his pro-rata share based on his productive acreage. While there is no law to prevent this, nor even any kind of a proposed prorating agreement, and while it is recognized common practice for each operator to get all the gas he can, it hardly seems fair to do so to the detriment of others. This raises the question of whether or not the Commission should lend its sanction to that practice.

Opposition

Rochester Gas and Electric Corporation filed a written protest opposing the granting of the petition in this proceeding. Its president, Mr. Herman Russell, appeared as a witness and testified that the granting of this petition would result in direct loss to his company, create direct competition in a small part of its franchise territory, endanger the supply of natural gas which his company furnishes to Canandaigua, and would place his company in a position where it would be forced to handle natural gas in the city of Rochester without real savings to the consumers.

The direct loss cited was the business of Eastman Kodak Company of nearly $8,000 per year gross revenue. Mr. Russell thought that practically the entire amount would be reflected in net revenue as the Rochester Company's plant is not operating at capacity, the by-products pay for the coal and the loss of that business would have little effect on operating expenses. These sales, however, are but a very small part of the total gas revenues of approximately $4,000,000 per year.

At present, according to witness Russell, the Rochester Gas and Electric Corporation distributes gas to 374 consumers in the town of Gates and 2,895 in the town of Greece, but does not serve in the town of Chili. The petitioner has also secured franchises in these three towns. Mr. Russell testified that his company has plans under way to extend its mains in the town of Chili and that it is prepared to extend its mains wherever the business justifies the requirements. The present situation in these towns was shown in detail in Exhibits 81 and 82, and by the testimony of witness East. Further, he was of the opinion that the construction of the proposed line would have a serious effect on the

public relations of the Rochester Company.

This witness also testified that the Rochester Company has been supplying the city of Canandaigua with natural gas since September, 1934. This natural gas, he claimed, came from the fields from which Godfrey L. Cabot, Inc., proposes to draw gas to sell to Cabot Gas Corporation. These additional withdrawals alone, he thought, would materially shorten the life of the fields and would stimulate other producers in these fields to withdraw their gas more rapidly, thereby further shortening the life of the fields and the time in which Canandaigua could get natural gas from these fields. On cross-examination it was brought out that Godfrey L. Cabot, Inc., proposes to draw gas to sell to Cabot Gas Corporation from only one of the fields from which Canandaigua's supply comes.

Rochester Gas and Electric Corporation further opposes the granting of the petition in this proceeding as it believes that it will be placed in a position where it will be forced to buy and distribute natural gas in the city of Rochester without real savings to the consumers. Mr. Russell stated that he was personally familiar with places where that happened and cited the case of the city of Detroit in particular. He also cited the case of the city of Geneva, N. Y., where he said that the saving ($65,000) made possible in reduced rates by the substitution of natural for artificial gas was more than offset by the loss of wages ($200,000) of the employees thrown out of work. Further he asserted that that $65,000 saving could not be considered permanent, for when the present source of supply is exhausted the Geneva Company must secure a supply from more remote places or go back to artificial gas. In either event, he thought that would mean higher cost to the company and increased rates to the consumer. He testified that the average production cost of the Rochester Company's plant over the last five years was 12 cents per thousand cubic feet with a B.T.U. content of 537 and that that average cost could be reduced with greater production, the capacity of the plant being 16 million while production was averaging 12 million. In his opinion, the substitution of natural for artificial gas by the Rochester Company would not be of benefit to the public, for the company could not buy and never had an offer to buy natural gas for the city of Rochester for any length of time at a price that would enable it to make a saving which could be passed on to its consumers. In addition, such substitution would mean shutting down the present gas manufacturing plant, loss of employment for 600 employees, loss of payroll of about $1,000,000 a year, and making idle an investment of $9,000,000—no matter at what price the gas was bought or what the B.T.U. content was. Further, there would be the expense of conversion, estimated to cost about $400,000, which would be borne largely by the company with the possibility of the expense of a like amount for reconversion if Rochester has to go back to artificial gas.

In comparison with its average production cost of 12 cents per thousand cubic feet of gas with a B.T.U. content of 537, which is equivalent to about 22 cents per thousand cubic feet

of gas with a B.T.U. content of 1,000, this witness stated that his company was offered natural gas by Cabot at less than 20 cents for limited industrial use and for very limited periods; that the Cabot Company offered natural gas for general distribution at 27 cents per thousand cubic feet for the first year, 28 cents per thousand cubic feet for the second year, and 29 cents per thousand cubic feet for the third year; and for industrial use at 30 cents for the first 500,000, 25 cents for the next million, 20 cents for the next 2½ million, and 16 cents for all over 4 million. This witness further stated that the Rochester Company would accept at any time an offer of natural gas which would result in a saving to the people of Rochester, taking into consideration the shutting down of the plant, the loss in taxes, and the loss of payroll, and providing it was for over a sufficient period of years to warrant the contract.

Mr. Russell thinks that the only possibility of making the proposed Cabot project financially sound would be to secure a large domestic business, and the only large domestic field in the territory is that of the Rochester Company. Unless a large domestic business could be obtained, he did not believe that the undertaking could be made financially successful.

The real danger to the Rochester Company, as this witness sees it, is that in the future after the present reserves are exhausted, Cabot, having the line, would use it to bring gas from a longer distance. Then the Rochester Company, having been forced into a position of supplying natural gas, would be faced with a higher price for gas with loss to the company and no benefit to the consumers.

Seven railroads appeared in opposition to the granting of this application. They were the New York Central, Baltimore and Ohio, Erie, Lackawanna, Lehigh Valley, Pennsylvania, and Pittsburg, Shawmut and Northern. These companies presented evidence consisting of the testimony of ten witnesses (S.M. 911–1026; 1547–1563) and the submission of 17 exhibits (Exhibits 34 to 51, inclusive, except 45 which was not received). Much of their witnesses' testimony and many of their exhibits were too general in nature to be pertinent to the application in this proceeding. Counsel for these railroads also took part in the cross-examination of the witnesses for the petitioner.

Witness Jennings, general coal freight agent for the Pennsylvania Railroad Company, summed up the position of the railroads quite generally when he said:

"The Pennsylvania Railroad is vitally interested in the outcome of these proceedings for from the evidence submitted there is every reason to believe its tonnage and revenues and with it employment and ability to serve the public, will be materially affected." (S.M. 934.)

The witnesses for the railroads showed that bituminous coal hauled for the Kodak Park plant of Eastman Kodak Company for the 5½-year period beginning January 1, 1931, and ending June 30, 1936, was 814,625 net tons, and that the freight charges thereon, including emergency charges, totaled $1,929,256.83 (Exhibit 40).

The figures for the year 1935 and for the first half of 1936 are:

Year	Net tons	Freight charges including emergency charges
1935	168,373	$404,951.11
1936 (first half)	90,474	222,507.63

This coal for the Kodak Park plant was hauled by the Baltimore and Ohio, New York Central, and Pennsylvania railroads. For the Pennsylvania Railroad the bituminous coal hauled for Eastman Kodak Company was 21.5 per cent of the total cars handled in and out of Rochester (S.M. 948). In addition, the witness for the Baltimore and Ohio also testified that in 1935 that railroad hauled 2,310 net tons of bituminous coal and 1,368 tons of coke to the Pavilion Natural Gas Company and 13,035 net tons of bituminous coal and 288 net tons of coke to two of the other potential industrial users of natural gas from Cabot Gas Corporation (S.M. 963). The witness for the Erie Railroad testified that in 1935 that railroad hauled about 33,000 net tons of bituminous coal, with freight charges exclusive of emergency charges of about $70,000, to another of the potential users of natural gas from Cabot Gas Corporation (S.M. 989).

These railroads stated that if this application is granted, they will lose the revenue now derived from the bituminous coal hauled for the Kodak Park plant of Eastman Kodak Company, amounting to some $400,000 per year, and from the bituminous coal and coke hauled for Pavilion Natural Gas Company and its consumers who would substitute natural gas for coal; also, that there is a potential loss facing them if Cabot Gas Corporation supplies natural gas to other users of coal both industrial and domestic, along the route of the proposed Cabot line—and this in view of the fact that bituminous coal represents a substantial portion of the total freight handled on their Rochester divisions.

Four large coal companies, the General Coal Company, the Pittsburgh Coal Company, Inc., the Rochester and Pittsburgh Coal Company, and the North American Coal Corporation and three of their general organizations, the Anthracite Institute, the Rochester Coal Merchants' Association, and the New York State Retail Solid Fuel Merchants' Association, opposed the application, alleging unfair competition (S.M. 900). Admitting self-interest (S.M. 903) through contemplated and potential loss of business, they based their opposition primarily on the public interest. Aside from considerable cross-examination of all witnesses by their counsel, their principal direct evidence was presented by Geologist Davis who was their only witness. They attempted to show that natural gas reserves were limited in amount while coal reserves are not, and that natural gas should be conserved for the highest grade uses. The general evidence on this subject has already been reviewed.

Other gas companies objecting to the granting of this petition were: The Producers Gas Company, Empire Gas and Electric Company, Elmira Light, Heat and Power Company, New York State Electric & Gas Corporation, New York Central Electric Corporation, Caledonia Nat-

ural Gas Company, and Tri-County Natural Gas Company. Their objection, in general, is that the natural gas in the fields from which they obtain their supply and from which the petitioner proposes to draw its supply should be conserved for existing markets, and that no public convenience or necessity has been shown. Producers Gas Company and Tri-State Natural Gas Company further object to that part of the application where the petitioner asks to sell and/or transport gas in the towns of Amity, Wheatland, and Caledonia where they now serve.

Exhibit 79 graphically portrays most of the territory now served in New York state with natural gas from the fields. Fifteen or twenty cities and villages in this state, having upwards of 300,000 gas consumers, are so served, at least in part. The mayors or corporation counsels of the following cities and villages appeared in person at the hearing and voiced their objections: Elmira, Auburn, Seneca Falls, Waterloo, Penn Yan, and Geneva. In addition, letters or telegrams opposing the granting of the application were received from officials of Hornell, Addison, Canandaigua, Cortland, and Ithaca, together with a number of individuals. The objections of these communities were principally that the gas from these fields should be conserved for their localities and for the highest grade use—the domestic market. While their objections are perhaps based on selfish motives, it is a fact that most of these localities are now being, and have been for some time, served from these fields, the pipe lines are laid, and the consumers' equipment has been converted for use of natural or mixed gas at great expense.

Representatives of the petitioner have pointed out that it will draw gas from only one or two of the major Oriskany gas fields from which the municipalities obtain their supply, that approximately 80 per cent of its contemplated load will be drawn from Pennsylvania, and that a considerable portion of the gas drawn from these fields for the municipalities objecting to its petition is used for low-grade purposes.

As a partial offset to the communities appearing in opposition to the granting of the petition several municipalities in the territory of the Pavilion Company sent official representatives to favor the application. Trustees of the villages of Avon, Perry, Mount Morris, and Geneseo appeared with approving resolutions. Representatives of business men's and other local organizations of LeRoy, Warsaw, and Geneseo also came to advocate approval of the application.

Discussion

The public utility gas companies, the railroads, and the coal companies appearing in opposition, attempted to show that the proposed construction would not be a profitable or feasible enterprise, that the petitioner is not financially responsible, that he is merely attempting to salvage "an unfortunate investment" in Pennsylvania gas fields, that the source of supply of natural gas is inadequate and the proposed use wasteful. Their evidence does not altogether support these claims. They also based their opposition on the assertion that the

proposal is not in the public interest. In this they were more convincing.

From the evidence it appears that the petitioner has established the following facts: (1) that its parent and sponsor company is financially responsible and able to construct the line and to deliver the gas contracted for, but that it is entirely dependent upon that foreign corporation both financially and for its gas supply; (2) that with the business contracted and in sight a reasonable earning is possible upon the investment over a period of years in addition to amortizing the cost of the line within a comparatively short period; (3) that it has an adequate source of supply for the period of its contract obligations, but beyond that the supply is uncertain; (4) that there is a market for natural gas in the territory proposed to be served; but that the supplying of this market will be advantageous principally to certain industries though to some extent to domestic customers as well.

The strongest point in favor of the approval of this petition is the contract with the Pavilion Company and the promise which this new supply of gas gives for improving its service and reducing its costs and rates. With the using up of its supply of natural gas from its shallow wells, pressures have declined, more expensive and less satisfactorily manufactured gas has had to be added, and service and rates have become increasingly unsatisfactory to consumers. Much the same may be said of the small Churchville Natural Gas Company and the Tri-County Natural Gas Company which Pavilion supplies. These companies together have about 5,000 customers, chiefly domestic. To them this new supply of natural gas means better service at probably lower rates, while to the companies it means better earnings at least and perhaps salvaging a losing investment. That the communities served appreciate that the public interest in the proposed line in their territory is great is shown by their testimony and resolutions. If this were all that is involved in this petition, and if service to Pavilion customers alone would warrant the building of this line, I would favor the granting of the petition, for I think the public convenience and necessity here is relatively great.

There is also some public interest, though to a lesser number of customers, in serving a few customers in several towns along the route which have granted distribution franchises, especially in portions which are not now and probably would not be served economically by existing companies.

A weakness in the petitioner's case lies in the fact that it is merely an agent of and completely controlled by a foreign corporation. While the Commission has full jurisdiction over the petitioner pipe-line company, it has very little if any over the foreign corporation. To be sure, there is a contract between the Cabot Gas Corporation and Godfrey L. Cabot, Inc., obligating the latter to furnish a supply of gas to the former for a period of three years. Mr. Cabot is president of both corporations and signed both contracts. The price is not guaranteed in the contract and might be increased, although Mr. Cabot testified that it would not be for a period of three years (S.M. 870). After that it might be. Nevertheless, the petition-

er, the Cabot Gas Corporation, is absolutely dependent upon its parent for initial financing, for its gas supply and the cost thereof, and its service could be seriously impaired and its costs greatly increased at any time if the interests of its parent company required partial or entire withdrawal from the enterprise. This parent company is a foreign corporation, which the Commission would be substantially powerless to compel to sell an adequate supply of gas to the petitioner at fair and reasonable prices, or to adequately support financially.

But these are not the only considerations. There are collateral effects of the granting of this petition which involve matters of public policy and which must therefore have further consideration.

The basic considerations on which the decision on this application must rest are broad matters of public policy, principally as related to conservation of natural resources. Should the owners of extensive natural gas leaseholds and wells be permitted to dissipate these resources by selling them to large industrial concerns for cheap fuel purposes at low competitive prices, which displace coal and at the same time deprive railroads of a large source of freight revenue? Or is it required that they should be conserved for the use of thousands of domestic users, especially those who have purchased their equipment and depend upon these natural gas fields as a source of supply? Or, if large industrial consumers make possible the building of these expensive transmission lines, which could not otherwise be economically constructed and would not be built, and incidentally provide cheaper gas to certain groups of domestic and small commercial consumers, does this justify the sale of gas at such low competitive prices for low grade fuel use? If certain existing public utilities are financially injured and their service impaired while others are aided by having their dwindling supplies augmented and their business revived, what is the duty of this Commission? What does the public interest require? Obviously all these matters must be carefully weighed and evaluated, and the greatest public interest, when determined, should control.

The Rochester Gas and Electric Corporation makes the important contentions that the bringing of this supply of natural gas to Rochester may force it to abandon its plant for the manufacture of gas, at least temporarily, and to substitute natural gas at least in part therefor. This would also involve the changing over of its equipment, which would be expensive. The Rochester Company further points out that the petitioner company is unwilling and probably unable to make a contract with it for any supply of natural gas for a period of more than three years, and claims that the evidence shows that it could supply all the needs of Rochester for only a very short period, if at all. If this is the fact, it would necessitate a changing back of the equipment after a few years. Meanwhile the company's manufacturing plant would be closed and unproductive, which would throw 600 employees out of work. These allegations, if true, raise the question as to whether the Commission ought to permit the construction of the pipe line and the exercise of the franchises

which would so injuriously affect a large existing public utility which has long served the Rochester public reasonably well.

The fears of the Rochester Gas and Electric Corporation as to the injury that would be done to its business and to its customers, *if justified,* should be accorded much weight. Certainly the loss of $8,000 of gas business now sold to Eastman Kodak Company is real, though far from fatal. It seems probable too, that some additional amount of business, industrial as well as domestic,—perhaps of questionable profit,—in the towns of Gates and Greece, would be lost to the corporation. This could of course be prevented by limiting approval of the exercise of the franchises in those towns to transmission and disapproving them as to distribution.

The Rochester Company appears to forget that the applicant has neither asked for nor received a consent from the city of Rochester to distribute natural gas in that city, and that even if it had obtained such a consent its exercise would have to be approved by this Commission. In that event, the questions herein as they would affect it would necessarily have to be reviewed and the requirements of public convenience freshly determined in that particular application. Here and now there is no such application before us.

President Russell of the Rochester Company thinks that once cheap natural gas was at the city gates public opinion would force his company to buy gas from Cabot and the Commission to approve the change to natural gas. In support of this view he cited what happened in Geneva in 1935 as an exactly parallel case (S.M. 1057). He may be right, but that is a matter of opinion. Mr. Cabot disavows any desire or intention to market gas in Rochester, if the Rochester Company does not want it. Moreover, the testimony of the Rochester Company's own geologist witness makes it very doubtful if Cabot has or could get more than enough gas to fill the 3-year Eastman and the 5-year Pavilion contracts. If we accept this company's own proof as to the future supply of gas, its fears are merely a bogey and not based on conditions likely to be realized.

The sale and transportation of the coal to Rochester and to other industries in western New York, which the proposed sale of this natural gas would displace, would naturally seriously injure the business of the New York state railroads transporting coal to the merchants of western New York and to a certain extent would injure the business of coal companies supplying this coal. Is this a matter of sufficient public interest to warrant the Commission in refusing its consent to build a pipe line and transport and sell the gas?

I am not greatly impressed by the competitive argument. Too much of the evidence on this point has little probative value. The fact that coal companies lose business and railroads lose freight income should not be controlling, if the larger public interest is better served by the change. Fuel oils and other fuels have made great inroads on coal usage; but who will say that they have not contributed largely to the convenience of the general public in labor, cleanliness, and efficiency, if not in savings? Automobiles and trucks have undoubtedly reduced the

revenues of the railroads, but few will deny that they have served the public convenience. If the fact that the general public interest will be served by the construction of this gas line has been established, the petition should not be denied for these reasons. To do so would be to impede and delay progress.

But has it been affirmatively shown that the general public will be better served by permitting the construction of this pipe line? The Rochester public obtains no direct benefit from it and might eventually be injured if the line were built. The only benefit to Rochester is the saving to the Eastman Kodak Company, and then only such as that company chooses to pass on to the public. True, as already pointed out, there is strong public interest in the communities served by the Pavilion Company; but is it sufficient? We must consider the weight of the evidence as a whole. If this natural gas were to be made available to general consumers in Rochester and vicinity generally at reduced and advantageous prices, the public interest would be very different.

A further question of public policy is raised by the fact that by far the greater part—about 93 per cent—of the natural gas proposed to be transmitted is to be put to a comparatively low grade use, namely, use as fuel under the boilers of large industrial plants. Is it wise to thus use up an important natural resource, or should it be conserved for the use of domestic and smaller commercial and industrial customers? Even Mr. Hine, appearing for the petitioner, thought that it would not be in the public interest to use as much as 90 per cent of the available gas supplies for industrial loads (S.M. 592), though he did not know the total supply. Apparently if it was limited, he would think much less should be so used.

The use of natural gas for domestic purposes is said to be the highest use to which this commodity can be put, while the burning of this fuel under boilers generating steam is thought to be the lowest grade of use. The profits or conveniences resulting from domestic use inure to large numbers of individuals. The profits or conveniences resulting from boiler use inure chiefly to the benefit of the single individual or corporation using it ($225,000 to Eastman Kodak Company in this instance), by reducing expenses, which may or may not be passed on to customers. There may also be a certain element of cleanliness which benefits both workers and products. There is wastage of this natural resource now through such low-grade use, perhaps justifiable, perhaps unavoidable, under existing circumstances.

It is pointed out by petitioner that 80 per cent of the natural gas used in New York comes from Pennsylvania; that this Commission has no control whatever over conservation in that state, that new pipe lines are being projected, that right or wrong the gas will be withdrawn, and that conservation is utterly impossible under the circumstances. All this may be true, but this Commission does not need to put its stamp of approval on these conditions. Certainly there should be no new application or diversion of natural gas which is wasteful or selfish. That much is clear. And this conclusion squares with the estab-

lished policy and practice of this Commission, *viz.*, that the interests of the domestic user of gas should be protected and his needs served first (see report of Natural Gas Investigation by this Commission, Case No. 7091, approved January 12, 1932).

Both on his cross-examination of opponents' witnesses and in his brief, counsel for the petitioner made much of the facts that the Commission has permitted the Home Gas Company and the Lycoming Natural Gas Corporation through the New York State Natural Gas Corporation to furnish large quantities of natural gas to certain plants for boiler fuel, arguing that Cabot should be permitted to do the same, and that opponents seek to have arrested only the "new highway robbers," leaving old ones unmolested. While apparently approving the policy of conservation of natural gas, counsel criticizes the Commission for not having lived up to such a policy laid down in 1932. So, he advocates further disregard of that policy. That may be good logic but it does not appeal to my sense of right. One mistake—if it was a mistake—does not deserve another. If the Commission has not properly followed a sound policy in the public interest, it should begin right now, and with an outstanding case where the issue is squarely raised. Counsel knows that the other instances of boiler fuel use, which he cites, are not the same. Lines were not specifically authorized by the Commission for the transmission of natural gas for use as a boiler fuel, and no such application as this one was ever before us. In other instances the lines were there primarily for domestic use, and boiler fuel use was permitted to reduce costs to domestic users.

There may have been some significance in the fact that Mr. Hine, asked if he considered that granting the application would be a detriment to the public interest, replied that he could find nothing objectionable to the public interest (S.M. 583). That is as far as he would go. But the negative is not enough. The law requires that it must be affirmatively shown that the exercise of franchises and the building of the plant are in the public interest. The opinion of the cities and villages now served with natural gas from these same fields, as expressed by their public officials, was decidedly and unanimously that it would not be in the public interest to grant the application.

Summarizing this discussion, it appears that the principal, indeed almost the only advantage to be gained by the public from approval of this application is the augmented supply of natural gas to the Pavilion Company which will enable it to improve its service and reduce its rates to about five thousand domestic customers. A similar advantage of natural gas service might accrue to a much smaller number of customers to be supplied with natural gas in certain other communities. A number of small industries would also be able to secure cheaper fuel replacing coal. Large advantages would be obtained by two large corporations: Eastman Kodak Company would make a considerable saving from cheaper fuel, and Godfrey L. Cabot, Inc., would obtain a good market for a large amount of gas apparently with a substantial profit. The building of this line

would apparently be a sound business venture and would make natural gas available to a considerable number of domestic consumers who could not be adequately served with this commodity otherwise.

Over against these advantages must be set several disadvantages. First and most important is the using up of large quantities of natural gas for low-grade fuel purposes, at least theoretically and probably actually seriously depleting the available supply to customers already being served from these same gas fields. There may be good and sufficient reasons for authorizing a supplementary or replacement supply of gas for domestic purposes to communities already served with natural gas, but the opening up of entirely new markets, especially for low-grade industrial purposes, when there is doubt of the permanency of the present supply to existing markets, is to say the least, of doubtful wisdom as a public policy. This consideration in itself, in my opinion, should be substantially determinative.

Secondly, there is the possibility, not wholly substantiated and more or less speculative, that authorization of the building of a gas pipe line to the gates of the city of Rochester might seriously affect the business of a long-established gas utility with little or no permanent advantage to its customers, and even to their ultimate disadvantage. For it is hardly to be expected that natural gas sufficient to supply Rochester over a period of years will be available, at least without substantial increase in price and to the detriment of consumers elsewhere, who are generally dependent on this same source of supply. Nor is the need for a supply of natural gas to Rochester consumers clearly apparent. They are now served with an ample supply of manufactured gas at prices which compare favorably with those of other comparable cities—*e.g.*, Syracuse, which has natural gas from the same general sources from which Rochester would be supplied.

Again, there is the accompanying disadvantage to the coal industry and to the carriers of coal through what is probably wasteful and unnecessary competition. If other considerations clearly were in the public interest, I do not think that this would be determinative. It does, however, add a certain weight to the objections and helps to throw the balance of the considerations against the petitioner.

Conclusion and Recommendation

It cannot be denied that a certain amount of public interest has been shown, though in my opinion it is more than offset by the adverse effect on the public of the dissipation of the reserves of natural gas for unnecessary and low-grade fuel purposes, and to a less extent by the possible detrimental effect on the Rochester public which is now served by the Rochester Gas and Electric Corporation, and by certain railroads. I do not think that it has been affirmatively established by the weight of the evidence that the granting of the application is necessary and convenient for the public service.

I recommend that the petition be denied. A suitable order is submitted accordingly.

Chairman Maltbie in the negative

filing memorandum dated September 18, 1936; Commissioner Van Namee in the negative; Commissioner Lunn in the negative filing memorandum dated September 15, 1936; Commissioner Brewster in the negative.

CALIFORNIA RAILROAD COMMISSION

Re Pacific Gas & Electric Company et al.

[Case No. 4124.]

Re City of Oakland

[Application No. 20455.]

[Decision No. 29264.]

Rates, § 383 — Natural gas — Change in heating value — Absence of rate increase.

1. The filing of a rule specifying the monthly average heating value of natural gas, superseding existing rules which specify merely "natural gas" without limitation as to heating value, does not constitute an increase in rates when the limitations as to heating value increase rather than decrease the minimum allowable heating value, p. 484.

Service, § 162 — Rules and regulations — Necessity of showing and finding — Gas standards.

2. No showing or finding is necessary to make effective a rule specifying the monthly average heating value of natural gas when such a rule does not result in increasing rates or charges, p. 484.

Service, § 361 — Natural gas — Standards — Fluctuations — Heating value.

3. A certain leeway or tolerance must be allowed in the formulation and interpretation of rules and orders governing the quality of natural gas where there exists an entire lack of control by the utilities over the heating value of gas delivered by various gas producers and gasoline extraction companies and the heating value varies from time to time depending upon particular gas fields, p. 485.

Service, § 361 — Natural gas — Heating standards — Rules.

4. A public utility was required to revise a rule and regulation specifying heating quality of natural gas so as to set forth the maximum and minimum limits between which the average monthly heating value might be expected to vary in each portion of its system having different limits, it being the understanding that if and when the utility determines that it would be unable to further maintain such limits, it would formally present the matter to the Commission, p. 485.

[November 9, 1936.]

RE PACIFIC GAS & ELECTRIC CO.

INVESTIGATION of rules and regulations relating to character of natural gas service; order entered in accordance with opinion.

APPEARANCES: F. B. Fernhoff and W. W. Cooper, for city of Oakland; J. J. O'Toole and Dion Holm, for city of San Francisco; T. B. Quinn and W. B. Hogan, for city of Stockton; Chas. Clifford, for Marin County Board of Supervisors; Pillsbury, Madison & Sutro, by H. Fullerton, for Standard Oil Company of California; C. P. Cutten and R. W. Duval, for Pacific Gas & Electric Co. and San Joaquin Light and Power Corporation; C. L. Rowe, for city of Fresno.

By the COMMISSION: On April 3, 1936, the city of Oakland filed its Application No. 20455, in which it petitions the Commission to declare null and void and strike from its files Rule and Regulation No. 2—Character of Service—filed October 22, 1935, by Pacific Gas and Electric Co., effective December 1, 1935, and identified as Revised Sheet C. R. C. No. 473-G, in so far as said rule and regulation purports to fix and establish the heating value of natural gas to be supplied to its consumers, and to fix and establish in lieu thereof the minimum heating value of natural gas to be furnished, pursuant to existing natural gas schedules, on the basis of approximately 1,150 B.T.U. per cubic foot.

On April 17, 1936, the Commission received a letter dated April 15, 1936, from the city clerk of the city of Fresno, stating that

"By resolution of the Commission of the city of Fresno, adopted at the last regular meeting, the undersigned was directed to communicate with the Railroad Commission of the state of California and most respectfully request that your Honorable Commission issue an order fixing a minimum requirement of 1,150 B.T.U.'s for gas furnished local residents by the San Joaquin Light and Power Co."

On May 4, 1936, the Commission issued its Order Instituting Investigation (Case No. 4124) on its own motion into the reasonableness of the Rules and Regulations, in so far as they relate to the quality or character of natural gas served, of Pacific Gas and Electric Company and San Joaquin Light and Power Corporation.

Both of these matters were finally set for public hearing before Commissioner Harris in San Francisco on August 26, 1936, written notice thereof being forwarded on August 18, 1936, to the two utilities involved, and to the city attorneys of Oakland, San Francisco, Sacramento, Stockton, San Jose, Berkeley, Alameda, Fresno, and Bakersfield.

Public hearing was held on these matters at San Francisco on August 26, 1936, at which time they were consolidated for purposes of hearing. Appearances were entered by the two utilities involved, and by the cities of Oakland, San Francisco, Stockton, Marin County Board of Supervisors, and Standard Oil Company of California. No one appeared for the city of Fresno. At this hearing the matter was submitted, with the under-

standing that inasmuch as the city of Fresno had neglected to enter an appearance, the proceedings would be reopened should the city of Fresno so desire.

Although no direct request for the reopening of the proceedings was received from said city of Fresno, the Commission, on its own motion, issued its order reopening Case No. 4124 and set same for further hearing before Commissioner Harris at Fresno, on September 23, 1936.

A public hearing was held at Fresno on said date and the matter submitted.

In its Application No. 20455, the city of Oakland alleges that the present natural gas rates of Pacific Gas and Electric Company were predicated upon the furnishing of natural gas with a heating value of approximately 1,150 B.T.U. per cubic foot; that said Rule and Regulation No. 2 permits said utility to lawfully supply its consumers with natural gas having a monthly average heating value of less than 1,150 B.T.U. per cubic foot and as low as 900 B.T.U. per cubic foot; that a reduction in heating value below that assumed in the fixing of rates results in an increase in rates; "that the minutes and records of said Railroad Commission do not show or indicate any formal action, finding or order upon the part of said Railroad Commission ordering the filing or acceptance of said Rule and Regulation No. 2"; that no showing was made by said Commission that such increase was justified, as required by § 63 (a) of the Public Utilities Act; and that said Rule and Regulation No. 2 purports to authorize an unreasonable and unlawful discrimination by Pacific Gas and Electric Company between localities and consumers.

At the hearing in San Francisco, the city of Oakland, through its city attorney, read into the record a prepared statement, the purpose of which he stated was to direct the attention of the Commission to matters of record which are decisive of the application. In this statement, applicant claims that the operation of existing Rule and Regulation No. 2 of Pacific Gas and Electric Company "has for its result an increase in the charge for gas to consumers because decreased heat units increase the quantity of gas needed to perform an equivalent service, and with rates fixed on a volumetric basis, increased use means increased total cost." The statement continues: "furthermore, the applicable sections of G. O. 58-A need only to be read to show that Rule No. 2 fails to comply with the requirements of the General Order."

Said statement further claims that said Rule and Regulation No. 2 is invalid for two reasons:

1. That "it was not filed and accepted by the Commission as required by § 63 (a) of the Public Utilities Act, as there was no showing before the Commission or finding by the Commission that the increase in charges which might result from the acceptance of the new regulation were justified."

2. That "The purported rule does not comply with the requirements of this Commission's General Order No. 58-A 'Standards for Gas Service in the State of California,' effective July 1, 1932."

and claims that said Rule and Regulation No. 2 authorizes unjust dis-

crimination between communities at the will of the utility, but applicant makes no contention that since the filing or by reason of the filing of same, the utility has made an increase in the charge to its consumers.

Applicant, city of Oakland, called no witnesses and introduced no further testimony than the prepared statement above referred to, together with a memorandum of "Excerpts from Standards for Gas Service—Circular of the National Bureau of Standards, No. 405—U. S. Department of Commerce," which was received as Exhibit No. 1.

The utility, Pacific Gas and Electric Company, through its attorney, contended that its present Rule and Regulation No. 2 is more restrictive upon the utility than the rule that was superseded, in that it limits the heating value of the gas to from 900 to 1,200 B.T.U.'s per cubic foot, whereas the superseded rule simply stated "natural gas" without limitation in heating value and that the filing of the present rule in nowise results in an increase in a rate or charge for gas service to the utilities' consumers.

It contends, further, that no formal order or hearing under § 63 (a) of the Public Utilities Act was necessary to make such rule and regulation effective, in that it was filed in the same manner as all of the utilities of this state have been informally filing revisions of their rules and regulations with this Commission for the last twenty years; that said rule is just and reasonable and that same was filed and accepted by the Commission and is a valid and effective rule and regulation; that the rule in its present form accurately describes the character and quality of the gas available to the utility for use in supplying customer demands; that in practically all of the contracts under which the utility purchases natural gas in the fields it is obliged to take and pay for natural gas having a heating value of 900 B.T.U. or more per cubic foot, the purchase price being the same regardless of the heating value; that the heating value of the natural gas produced in a state of nature is beyond the control of the utility and that there is no economic way in which the heating value of said gas can be altered to meet any particular specifications; that the setting up by the Commission of a standard of quality for utilities higher than the normal range of the heating value of natural gas as now developed and which may be reasonably expected in the future would discourage the development of new fields, which development will be necessary to supply future demands for gas; that it is the purpose of the utility, in so far as is possible, to utilize the natural gas supplies available to it and to the fullest extent conserve and make economic and beneficial use of same; and, finally, that the utility has no intention whatsoever of seeking or taking a disproportionately large supply of relatively low heating value gas or gases, with the intent to reduce the heating value of gas which is supplied to its customers, nor of discriminating between communities or classes of consumers.

It contends, further, that although said rule and regulation does not strictly comply with Par. 11 of General Order No. 58-A, wherein the latter specifies that "Each gas utility supplying natural gas or hydrocarbon

gas for domestic, commercial, or industrial purposes, shall file with the Commission as a part of its schedule of rates, rules, and regulations, the average total heating value of the natural gas or hydrocarbon gas, together with the maximum fluctuation above or below the average total heating value which may be expected of the gas supplied by it in each district, division or community served," nevertheless the rule is in substantial compliance with said order; that there must be reasonable latitude in supplying natural gas service and that a strict and literal interpretation of said order would be impracticable and impossible of enforcement.

The utility called no witnesses and introduced but two exhibits, Exhibit No. 2—"San Joaquin Light and Power Corporation Gas Department, Chronological Record of Preliminary Statement and Rule 2" and Exhibit No. 3—"Pacific Gas and Electric Company—Gas Rule and Regulation No. 2 (Rule in effect immediately prior to introduction of natural gas and revisions to date)."

Mr. Claude C. Brown, chief engineer of the Commission, was called as a witness on behalf of the Commission and testified regarding the introduction of and change-over to the service of natural gas on the system of Pacific Gas and Electric Company, citing the applications and decisions involved, and as to the revisions and filings of Rule and Regulation No. 2 of said utility. He also testified as to the quantities of gas served in the East Bay division of said utility, and that the average heating value of same has been well above 1,150 B.T.U. per cubic foot at all times since the inception of natural gas service in said area, and quoted the corresponding Rule and Regulation No. 2 of other major gas utilities in California.

He further testified that the filings and revisions of Rule and Regulation No. 2 of both Pacific Gas and Electric Company and San Joaquin Light and Power Corporation had been regularly filed in accordance with the Commission's General Order No. 54, were all matters of public record, that no secret orders had been issued by the Commission, and pointed out the fact that continuously since the introduction of natural gas service in Fresno, the average monthly heating value of the gas served to the consumers in Fresno has been well above 1,150 B.T.U. per cubic foot; that all of the natural gas served in said Fresno area has come from the North Dome of the Kettleman Hills field; that same is and continuously has been delivered from said Kettleman Hills field to the Fresno system of San Joaquin Light and Power Corporation by means of a 10-inch line owned and operated by Southern California Gas Company and that although there exists a 6-inch emergency interconnection between this 10-inch line and the 16-inch Pacific Gas and Electric Company's Buttonwillow line, the valve in said 6-inch interconnection has been continuously closed, save for the period July 28, 1932, to August 5, 1932, during which time the valve in the 16-inch Buttonwillow line south of said 6-inch interconnection was closed and only Kettleman gas was served to Fresno through said 6-inch interconnection; that San Joaquin Light and Power Corporation purchases the natural gas that it serves to its consumers in Bakersfield from

Southern California Gas Company, and that said gas comes largely from the Midway field, which varies in heating value from 850 to 1,000 B.T.U. per cubic foot; that the Bakersfield system and the Fresno system have no physical connection; that the utilities regularly report to the Commission the heating value of the gas that they serve and that the Commission engineers periodically check the apparatus used to determine said heating value.

He further pointed out the difficulty of maintaining a closely regulated heating value of natural gas, due to the fact that the distributing utilities have no control over the operations of the producers and gasoline extraction plants, from whom they purchase their supplies of natural gas, which operations may cause wide variations in the heating value of said gas, and that a reasonable leeway or tolerance is therefore necessary in the rules and regulations of the utilities relating to said heating value.

At the hearing in Fresno, the city of Fresno called three witnesses. One of these, Mr. E. H. Musser, deputy supervisor, division of oil and gas, state of California, testified that he had no personal knowledge of the heating value of the natural gas secured from Buttonwillow field but that he understood from hearsay that it was approximately 950 B.T.U. per cubic foot. The second witness, Mr. R. C. Patterson, Supervisor of Oil and Gas Leasing Operations, United States Geological Survey, Department of the Interior, testified that while he had no personal knowledge of the heating value of the natural gas secured from either Buttonwillow or Kettleman Hills fields, he had heard that the heating value of the Buttonwillow field gas was in the neighborhood of 950 B.T.U. per cubic foot, while that from Kettleman had varied from 1,050 to 1,200 B.T.U. per cubic foot. He stated that (Tr. page 108):

"They take gas from the—that is produced from several different zones; we have what we call the white gas and the black gas zones and they commingle the gases and they get variables, they cannot get a standard regularly there because they commingle those gases and they have different properties."

The third witness, Mr. J. F. Dodge, professor in charge of the department of petroleum engineering, University of Southern California, testified that, in his opinion, the underground supply of natural gas in the Kettleman Hills field is approximately seven and one-half trillion cubic feet (above 50 pounds pressure) and although continuously since 1930 this field has been physically capable of producing all of the gas that the compressor and transmission lines from it could handle, that other fields might have to be called upon to carry peak demands; that if a Thomas recording calorimeter were allowed to get out of adjustment it would read incorrectly; that, in his opinion, a reasonable minimum heating value of the Kettleman Hills gas served in Fresno would be 1,075 or 1,100 B.T.U. per cubic foot; that the record in his files of the heating value of Kettleman Hills dry gas, as furnished to him by others, varied from 1,110 to 1,156 B.T.U. per cubic foot; that the operation of gas appliances adjusted for 1,150 or 1,175 B.T.U. gas, with 850 B.T.U. gas would be highly unsatisfactory; that, in his opinion, it

is highly desirable to use gas from the dry gas fields to help carry peak demands.

The utility, through its witnesses, introduced testimony to the effect that the natural gas which it furnishes to its consumers in Fresno, Madera, Chowchilla, Merced, Selma, Sanger, and contiguous territory is purchased from Pacific Gas and Electric Company and has come entirely from the North Dome of Kettleman Hills, while the natural gas that it serves to its consumers in Bakersfield is purchased from Southern California Gas Company; that there is no connection between the Pacific Gas and Electric Company's Kettleman compressor station and the Southern California Gas Company's 10-inch line that serves Fresno, and no connection between the 16-inch Pacific Gas and Electric Company's Buttonwillow line and said Southern California Gas Company's 10-inch line, other than the 6-inch emergency interconnection referred to in previous testimony; that it would be physically impossible to bring gas north from Buttonwillow, mix it with Kettleman gas in said compressor station, and transmit it to Fresno through existing facilities; that nothing but straight Kettleman Hills gas has ever been delivered to Fresno; that any gas from Buttonwillow and Semitropic is and always has been commingled and mixed, at the compressor station, with Kettleman Hills gas and transmitted north through the Pacific Gas and Electric Company and Stanpac lines for delivery to the consumers of Pacific Gas and Electric Company in the north and to Standard Oil Company and its subsidiaries and that none of it was delivered to Fresno; that the calorimeters of the San Joaquin Light and Power Corporation are carefully maintained and tested each week and kept in proper adjustment; and that the average monthly heating value of the natural gas delivered in Fresno and Bakersfield and, as recorded by the recording calorimeters during the period January, 1932, to August, 1936, inclusive, varied from a minimum of 1,152 to a maximum of 1,212 B.T.U. per cubic foot in Fresno, and from a minimum of 950 to a maximum of 1,069 B.T.U. per cubic foot in Bakersfield.

The issues in these proceedings are whether or not the existing Rules and Regulations No. 2 of Pacific Gas and Electric Company and San Joaquin Light and Power Company

1. Were properly filed with the Commission;

2. Are lawful and effective rules and regulations;

3. By their filing constitute an increase in gas rates;

4. Authorize unlawful and unreasonable discrimination between localities and consumer;

5. Have been fully complied with by the utilities;

6. Have resulted in the furnishing to Fresno consumers of other than Kettleman natural gas;

7. Are in compliance with General Order No. 58-A.

[1, 2] The evidence in the record of these proceedings indicates that in the cases of both utilities, the existing rules were filed with the Commission and put into effect in full and proper accordance with the Commission's General Order No. 54, and are therefore lawful and effective rules and

regulations. In both cases the rules which were superseded by the existing rules specified merely "natural gas" without limitation as to the heating value of the gas served, so that the limitations as to heating value as set forth in the existing rules increase rather than decrease the minimum allowable heating value of said gas and, therefore, do not constitute an increase in gas rates. There being no increase in rates or charges, no showing or finding was necessary to make the rules effective under § 63 (a) of the Public Utilities Act.

The existing rules, setting forth as they do the maximum and minimum heating value of the natural gas served on the system of each utility, are more restrictive in range than the rules which they superseded and, therefore, are less discriminatory than were the rules that they superseded.

As to the quality of the natural gas that the utilities are and have been serving under these rules since they became effective, the record clearly indicates that the heating value thereof has been well above the minimum limits specified in the rules, and that the consumers in Fresno have received none other than straight Kettleman Hills natural gas, with the exception of 1,823 thousand cubic feet of 950 B.T.U. Diesel gas manufactured in the standby plant in 1935.

[3, 4] The record further discloses the fact that although neither of the rules is in strict compliance with the provisions of General Order No. 58-A, in that they do not specify the average total heating value of the natural gas to be served together with the maximum fluctuation above or below said average which may be expected of the gas supplied in each district, division or community served, there exists an entire lack of control by the utilities over the heating value of the natural gas delivered to them by the gas producers and gasoline extraction companies from whom they purchase their supplies of said gas. And, further, that the heating value of said natural gas varies from time to time, depending upon the particular gas fields from which it is drawn and upon the operations of the producers and extraction companies in said fields; that a number of the recently discovered additional sources of natural gas contain dry gas of a lower heating value than that secured from Kettleman Hills field; and that in view of these facts it is essential that there be allowed a certain leeway or tolerance in the formulation and interpretation of rules and orders governing the quality of natural gas served under said rules and orders.

This Commission has, in the past, and will continue in the future, to keep closely in touch with the quantity, heating value, and cost of the natural gas purchased by these utilities from their various sources of supply, to the end that no prejudice may result to the consumers to whom the gas is served.

The order herein will require that the utilities render monthly reports to the Commission of the quantities of natural gas purchased, designating the various sources of supply and the purchase price for same. It will also require that Rule and Regulation No. 2 of each of the two utilities shall be so revised as to set forth the maximum and minimum limits between which the average monthly heating

value of the natural gas served may be expected to vary in each portion of its system having different limits, it being the understanding that if and when the utility determines that it will be unable to further maintain said limits it will formally present the matter to the Commission.

Appropriate steps will be taken by the Commission to make these requirements uniform for all the gas utilities in the state.

Order

The city of Oakland having petitioned the Commission to "declare null and void and therefore strike from its files all that portion of Rule and Regulation No. 2—Character of Service—filed October 22, 1935, by Pacific Gas and Electric Company, and bearing the designation 'Revised Sheet C.R.C. No. 473-G,' which purports to fix and establish the monthly average heating value of gas supplied on regular schedules, where natural gas is specified, between 900 B.T.U. and 1,200 B.T.U. (dry basis) per cubic foot, and fix and establish in lieu thereof the minimum heating content of natural gas to be furnished pursuant to existing natural gas schedules, on the basis used in the fixing of said schedules; that is, approximately 1,150 B.T.U. per cubic foot," and the Commission having, on its own motion, instituted an investigation into the reasonableness of the Rules and Regulations, in so far as they relate to the quality or character of natural gas served, of Pacific Gas and Electric Company and of San Joaquin Light and Power Corporation, hearings having been held, the proceedings having been submitted and being now ready for decision,

The Railroad Commission of the state of California hereby finds as a fact:

1. That the existing Rules and Regulations No. 2 of Pacific Gas and Electric Company and San Joaquin Light and Power Corporation were properly and lawfully filed with the Commission.

2. That said rules and regulations are therefore lawful and effective rules and regulations.

3. That the filing of these rules and regulations did not constitute an increase in gas rates.

4. That said rules do not authorize unlawful and unreasonable discrimination between localities and consumers.

5. That said rules have been fully complied with by said utilities, in that the heating value of the gas served by said utilities under said rules has been well above the minimum limits specified therein.

6. That the San Joaquin Light and Power Corporation has at no time served to its consumers in the city of Fresno any other gas than straight natural gas from Kettleman Hills oil field, with the exception of 1,823 thousand cubic feet of 950 B.T.U. Diesel gas manufactured in the Fresno standby gas plant in the year 1933.

7. That said Rules and Regulations No. 2 are not in strict compliance with General Order No. 58-A of this Commission.

Basing its order on the foregoing findings of fact, and on such other findings and statements of facts as are

set forth in the opinion preceding this order, or in this order,

It is hereby *ordered* that Application No. 20455 be and it is hereby dismissed.

It is hereby *further ordered* that Pacific Gas and Electric Company and San Joaquin Light and Power Corporation shall file with this Commission, starting with December, 1936, monthly statements showing the quantities of natural gas purchased during the preceding month, and the purchase price paid for same from each of its sources of natural gas supply.

It is hereby *further ordered* that Pacific Gas and Electric Company and San Joaquin Light and Power Corporation shall each file with this Commission, on or before December 1, 1936, a revision of its gas Rule and Regulation No. 2, setting forth therein the maximum and minimum limits between which the average monthly heating value of the natural gas served may be expected to vary for each portion of its system having different limits, said variation being limited to 100 B.T.U. per cubic foot of natural gas.

Except as otherwise provided, the effective date of this order shall be twenty days from and after the date hereof.

CARR, Commissioner: I concur in this order.

ARIZONA CORPORATION COMMISSION

Re Arizona Power Company

[Docket No. 6424-E-516, Decision No. 8641.]

Valuation, § 383 — Water rights — Ownership in fee simple.

1. A water right owned by an electric utility company in fee simple, acquired before the passage of various laws tending to restrict proprietorship in such rights, has a substantial value to the company either from its present use as a principal power source or as an actual asset which would likely find a ready sale, p. 490.

Valuation, § 193 — Property used or useful — Tunnels — Dams.

2. Tunnels, dams, and other improvements required for the conduct of water from its point of diversion to where it is utilized at power plants should be included in the rate base of an electric utility, p. 490.

Valuation, § 193 — Property used or useful — Roads and bridges — Relation to power project.

3. A system of roads, trails, and bridges required for the operation of electric utility property in connection with a hydroelectric plant and the estimated cost of securing transmission line and rights of way should be included in the rate base, p. 490.

Depreciation, § 51 — Electric utility.

4. An annual retirement reserve of a specified amount or 1 per cent of the cost new of the depreciable property, whichever should be greater, was approved in determining rates of a hydroelectric utility company, p. 491.

[October 19, 1936.]

INVESTIGATION *by the Commission on its own motion for the purpose of fixing electric rates, rules, and regulations; new rate schedules approved.*

APPEARANCES: Hon. A. I. Winsett, Deputy Attorney General, Crane & Darcey, Accountants, and Headman and Ferguson, Engineers, for the Commission; Francis D. Crable, Armstrong, Kramer, Morrison & Roche, by R. Wm. Kramer, L. D. Van Dyke, Engineer & Appraiser, L. V. Sears, Vice President & General Manager for the company, Malcolm Bridgewater, General Superintendent for the company, and Norman H. Ofsthun, Engineer, for the respondent; T. J. Byrne, City Attorney, appearing for the city of Prescott.

By the COMMISSION: This case was instituted by the Commission on its own initiative for the purpose of ascertaining the value of the property of The Arizona Power Company, and to secure such other facts as might be relevant in a review of the rates of said company.

Engineers and auditors were employed by the Commission, hearing was had pursuant to due notice, briefs are now filed, and the matter is ready for disposition.

Identity of Respondent Company

The identity of respondent and the salient facts of its corporate history are indicated in the following, quoted from the comments accompanying the audit report presented by the Commission's witnesses:

"The Arizona Power Company was incorporated under the Laws of Maine in the year 1907 to do a general light, gas, and power business. This company has been operating constantly in the territory and state of Arizona since 1908.

"Prescott Gas & Electric Company was incorporated under the Laws of Maine in the year 1910 to do a general light, gas, and power business. This company, while under the control of The Arizona Power Company, operated under its corporate name until the year 1922, when absorbed by the controlling company.

"Arizona Steam Generating Company was incorporated under the Laws of Arizona during the year 1917, the same being owned and operated by The Arizona Power Company.

"August 30, 1922, the president of The Arizona Power Company entered into a financing agreement whereby the three above companies were required to consolidate. Since the year 1922 all business and operations have been conducted under the corporate name, 'The Arizona Power Company.'

"Annual reports on file with the Commission indicate that the consolidation was authorized during

November, 1922, and effective January 1, 1923.

"During the year 1929 the Commonwealth Utilities Corporation assumed control of The Arizona Power Company. Subsequent thereto the holding and operating companies were operated under trusteeship. The trusteeship of The Arizona Power Company was terminated on or about October 1, 1935."

The receivership became effective January 7, 1934, and continued until July when the receiver qualified under the newly enacted Bankruptcy Act, as trustee, the trusteeship being terminated September 30, 1935. In the interim between the closing of the auditor's report and the date of the hearing, the Commission, in another proceeding, granted an application by the reorganization committee for confirmation of the plan of reorganization which terminated the trusteeship. The company was reorganized as The Arizona Power Corporation, to which the property was conveyed and which assumed the assets, liabilities, and obligations of its predecessor.

It was stipulated in the case at hand that the property and business under investigation had been preserved intact under the succession of recent corporate changes above outlined, and that The Arizona Power Corporation assumes the burden of meeting the obligations of respondent in this case.

The city of Prescott, where respondent maintains its general office and where it centers its operating activities, is the county seat of Yavapai county, and is much larger than any other community in the territory served. Power is derived from two hydro plants on Fossil creek, a tributary of the Verde river, some fifty miles distant from Prescott, and the company also maintains a steam plant for standby service, this plant being near Clarkdale. The transmission lines to Prescott and elsewhere extend through a mountainous country, difficult of access, and the total network of the lines, amounting to some three hundred miles, in addition to serving Prescott, also reaches as far as Ash Fork and Seligman to the north, forty miles distant to the county line to the south and to numerous small communities and mining properties.

Between the closing date of the appraisals and the date of the hearing further extensions of respondent's service were made to Flagstaff and to Wickenburg.

Gas supplied from a local plant is served in Prescott.

Value of Property

Engineers for the Commission and those appearing for respondent differed widely in their respective estimates of the cost of reproducing the property. Voluminous reports were filed by each and the matter was the subject of extended treatment in briefs. The following tabulation is a comparison of the estimates of reproduction cost new and reproduction cost less depreciation, as determined by the two engineers. The figures include estimated working capital.

	New	Depreciated
Electric Property		
Respondent's engineers	$7,268,082	$6,614,878
Commission's engineers	4,566,359	3,976,290
Difference	$2,701,723	2,638,588
Gas Property		
Respondent's engineers	$404,413	$358,992
Commission's engineers	277,122	215,457
Difference	$127,291	$143,535

Entirely different bases were used by the two engineers in classifying and grouping the property in their respective reports, which adds to the difficulty in determining where the principal differences exist, and the reason for the differences. While there is a wide disparity in the amounts assigned for undistributed construction costs and intangible items, it is evident that there are also substantial differences between the two reports with respect to tangible items as well. Without burdening this report with the minutiæ of a detailed analysis and contrast of the methods used by the respective appraisers in assigning unit costs it is sufficient to say that, in general, and with certain specific exceptions which will receive further comment, our findings are based upon our engineers' figures.

[1] Water rights originally carried at the book figure of $3,901,521.25, and appraised by respondent's witnesses at $700,264, were appraised by our witnesses at $250,000, an amount which we think inadequate and which we believe to be properly represented by $370,000. The right referred to is an ownership in fee simple of the waters of Fossil creek acquired many years ago before the passage of the various laws which now tend to restrict proprietorship in such rights. There is no gainsaying the substantial value to respondent from the possession of this right, either from its present use as a principal power source or as an actual asset which would likely find a ready sale.

[2, 3] We will modify our engineers' findings with respect to another group of items, comprised of certain tunnels, dams, and other improvements required for the conduct of the water from its point of diversion to where it is utilized at the power plants; together with a system of roads, trails, and bridges required for the operation of the property and for the estimated cost of securing transmission line and rights of way, concerning all of which it would appear that the Commission's engineers omitted the items in whole or in part.

The balance sheet as of August 31, 1935, shown by "Exhibit A" of the report submitted by the Commission auditor shows fixed capital in amounts as follows:

Electric	$7,961,775.96
Gas	181,067.56
	$8,142,843.52

Under the plan of reorganization perfected as of September 30, 1935, the fixed capital account was reduced to $5,408,775.46, and was not distributed between the gas and electric properties.

Giving effect to the conclusions reached in the course of our analysis of the evidence presented at the hearing, both with respect to estimates of reproduction cost and to book values, we find as a fair value for the adjudication of rates the following amounts:

Electric property	$4,788,179.00
Gas property	215,457.00
Total	$5,003,636.00

Retirement Reserve

Assuming that there should be some relationship between retirement reserve balance and the actual depreciation found by appraisers, it is evident that there is more nearly an agreement

of the various figures available with respect to depreciation and retirement reserve than was the case with the value of the property.

The figures are as follows:

	Electric	Gas	Total
Respondent's witness (10/1/35)	$692,752	$45,421	$738,173
Commission's witness (10/1/35)	620,544	61,665	682,209
Retirement reserve balance (8/31/35)	553,987	22,609	576,596

[4] In the application heretofore referred to for approval of the plan of reorganization, there was submitted in evidence a copy of the reorganized company's mortgage, paragraph thirteen of which relates to retirements and specifies in effect that there must be accrued to the retirement reserve annually either $55,000 or 1 per cent of the cost, new, of the depreciable property, whichever is the greater. We definitely confirm, at this time, this provision of the mortgage which received our approval by implication when the general reorganization plan was accepted.

Operations

A summary of the revenues and expenses of the electric and gas properties over recent years, as shown by the Commission auditor's "Exhibit E" is as follows:

	Revenues	Expenses	Net Operating Income
Electric Department			
1931	$505,861.85	$248,455.25	$257,406.60
1932	426,616.22	248,986.24	177,629.98
1933	381,070.08	224,706.76	156,363.32
1934	468,782.61	228,170.19	240,612.42
1935 (6 Mo.)	231,602.55	124,381.68	107,220.87
Gas Department			
1931	$52,142.68	$45,071.59	$7,071.09
1932	47,493.85	43,881.18	3,612.67
1933	42,988.46	40,122.52	2,865.94
1934	43,058.89	40,531.16	2,527.73
1935 (6 Mo.)	20,982.62	22,769.26	

From the supporting details contained in the audit report, it is found that of the total annual electric gross, in the neighborhood of $200,000 is derived from the sale of electricity for residential and commercial lighting. Sales to other nonaffiliated electric corporations amounting to $140,830.30 in 1931 declined to $32,776.72 in 1933, and are now increasing with the prospect of reaching or exceeding $50,000 annually. The remainder of the revenue is derived from the sale of electricity for power and miscellaneous uses, under various classifications, in amounts showing a decline from the 1931 figures but with prospects of recovery somewhat parallel to that shown by sales to nonaffiliated electric corporations.

In general the tendency has been toward an increase of gross, due apparently not only to the general business revival but in particular to a substantial increase in mining, and no doubt it will be accelerated by the extension of service to Wickenburg and Flagstaff. The expenses set forth include retirement expense in about the amount which we have heretofore declared reasonable, and taxes in the amounts actually accrued year by year.

Rates, Rules, and Regulations

The respondent's rates have reached their present form by a process of evolution over a period of some twenty-five years. There are schedules which were issued to meet conditions which later disappeared, but which have never been canceled. In a number of cases schedules which happen to be in effect by concerns taken over by The Arizona Power Company

were continued in effect, notwithstanding that the definitions and qualifications in the schedules were not consistent with corresponding general schedules of the company. Furthermore, we are of the opinion that there are too many alternative schedules for some classes of service and in some cases not sufficient differentiation between classes to justify separate schedules; therefore, we will take this occasion to simplify as far as possible these defects which have grown into the company's rate structure.

There are also valid reasons for the belief that to some extent sales have been obstructed by the amount and the methods of application of the rate schedules. The company, reasoning along the same line, voluntarily adopted certain promotional types of rates which, no doubt, have accomplished their purpose of increasing the volume of sales through a reduction in the prices charged. In this case in order to hasten this process and terminate the rate matters now before us, we will advance the effective date of the ultimate or objective rates which were issued as part of the general plan of promoting business.

Wherefore:

It is hereby *ordered*: (1) Effective with the bills issued by respondent on or about December 1, 1936, all of the company's existing rates for gas and/or electric service shall be suspended and void and of no further effect, and in lieu thereof there shall be charged by respondent for its gas and electric service the rates set forth in the rate schedule accompanying and made a part of this opinion and order, and identified as Schedules Nos. 1 to 18 inclusive; provided, that nothing herein shall be construed as changing in any way the force and effect of those certain contracts relating to the sale of power as between respondent and the town of Wickenburg, between respondent and Flagstaff Electric Light Company, between respondent and the city of Prescott with respect to street lighting, and between respondent and Smelter City Improvement Association.

It is *further ordered*: (2) That on or before fifteen days from the date hereof the company shall file with the Commission for its review, a complete schedule of service rules covering its practices with respect to collections, extensions of service, the testing of meters, and other matters commonly made the subject of general service rules which will be amended to meet the approval of the Commission, and accepted by suitable minute entry of the Commission.

It is *further ordered*: (3) That respondent shall file supplements with the Commission so as to maintain at all times a complete and detailed record of the facts serving as the basis for any adjustments of rates made to give effect to tax or fuel clauses authorized herein.

UTAH PUBLIC SERVICE COMMISSION

Public Utilities Commission of Utah (Public Service Commission of Utah)

v.

Utah Power & Light Company

[Case No. 1531.]

Discrimination, § 96 — Electric rates — Apartment building — Incidental lighting.

Different electric rate schedules for service to tenants of apartment buildings when electric ranges are used than for service when such ranges are not used should not govern the type of rate schedule applicable for incidental electric service to apartment house owners or operators for porch, hall, and general basement lighting and for small motors, but the same rate schedule should be used for the same type of service to different apartment house owners or operators.

[December 30, 1936.]

COMPLAINT *against electric rates for incidental service to apartment house owners and operators; complaint sustained and amendment to schedules ordered.*

By the COMMISSION: On November 27, 1936, some forty or fifty apartment house owners and operators filed with the Commission a request for revision of the schedules of Utah Power & Light Company, defendant in this case, in so far as they pertain to electric lighting service furnished apartment houses for porch, hall, and general basement lighting, and motors not exceeding two horsepower in rating. This request was referred to the Commission's consulting engineer, Mr. Leonard Wilson, for investigation and report.

On December 16, 1936, Mr. Wilson, appearing as a witness on behalf of the plaintiff in the above-titled case, stated that as a result of his investigation he had found that certain apartment houses are now served for porch, hall, and general basement lighting, and small motors under Schedule No. 2–D, P. S. C. U. Tariff No. 6, and other apartment houses served for the same uses under Schedule No. 1–C, P. U. C. U. No. 6.

Following Mr. Wilson, the plaintiff called as a witness Mr. W. F. Langton, field secretary of the apartment house industry, who testified that the determination of the applicable schedule to apartment houses followed the fact of use by the tenants residing in

the apartment house and served directly as customers of Utah Power & Light Company. In other words, when an apartment house is equipped with electrical refrigerators and not ranges, the incidental lighting service paid for by the apartment house owner or operator is supplied under Schedule No. 2–D. When electric range service is furnished to the tenants of an apartment house the incidental lighting paid for by the owner or operator is charged under Schedule No. 1–C.

The practice in applying the two different rate schedules is to classify the apartment houses under the respective schedules in the same manner as would be an individual dwelling. In so far as the electric service actually furnished to the owner or operator of the various apartment houses and without regard to uses of electric service taken and paid for by the tenants themselves, the practice of using both Schedules Nos. 2–D and 1–C for exactly the same type of service to the apartment house owner or operator in the opinion of the Commission should be discontinued. Appropriate changes should be made in Schedules Nos. 2–D and 1–C so that electric service for apartment house lighting and small motor use in apartment houses of eight apartments and over will be served under the lower of said schedules; to wit, Schedule No. 1–C.

There being no objection on the part of Utah Power & Light Company an interim order to this effect will be entered without prejudice as to action taken concerning any other schedule or any other matters now pending before the Commission and to continue in effect until further order of the Commission.

NEW YORK DEPARTMENT OF PUBLIC SERVICE, STATE DIVISION, PUBLIC SERVICE COMMISSION

Re Rochester Gas & Electric Corporation

[Case No. 8908.]

Security issues, § 123 — Authorization — Rehearing as to condition.

A public utility company which has been authorized to issue securities on condition that no dividends shall be declared upon outstanding common stock or voting trust certificates until a pending rate proceeding shall have been concluded should not, after accepting the order and issuing the securities, be granted a rehearing on the question of Commission jurisdiction to attach the condition.

[November 24, 1936.]

RE ROCHESTER GAS & ELECTRIC CORP.

PETITION by public utility corporation for rehearing on order authorizing security issues subject to stated conditions; rehearing denied.

By the COMMISSION: By order made in this case on September 23, 1936, the Commission authorized the Rochester Gas and Electric Corporation to issue, within a period not later than December 1, 1936, not to exceed $4,000,000 par amount of Series E 5 per cent cumulative preferred capital stock, to consist of not to exceed 40,000 shares of the par value of $100 each, to be sold at not less than $102 per share and accumulated dividends to realize proceeds of not less than $4,080,000 and to use the proceeds to retire by redemption, not later than December 1, 1936, at $105 per share and accumulated dividends, all of the corporation's outstanding Series B 7 per cent cumulative preferred capital stock, consisting of 40,000 shares of the par value of $100 each. Ordering Clause No. 7 of the above order provided as follows:

"7. That the authority granted by this order is upon the express condition that the petitioner shall not declare or pay any dividends upon its outstanding common stock or upon the voting trust certificates which evidence such stock until the rate proceeding (Case No. 8428) which is in progress against the said petitioner herein shall have been concluded."

The authority granted by the above order was conditioned upon the written acceptance thereof by the petitioner of all of the terms and conditions set forth in the order within ten days after the service upon it of a certified copy thereof.

The order was accepted on behalf of the corporation by E. C. Scobell, vice president, by acceptance dated September 28, 1936. Such acceptance contained no reservations, limitations or restrictions and did not in any way refer to any claim that any part of the order was considered illegal, improper or beyond the power of the Commission to impose.

The authorized stock was sold as authorized as of October 1, 1936, to various parties at $102 per share and accumulated dividends. The verified reports of the issuance of the stock were filed with the Commission as of October 7 and October 20, 1936, the last report showing that all of the stock had been issued and sold.

Ten days later or upon October 30, 1936, the corporation filed a petition for a rehearing in respect to ordering Clause No. 7 of the order of September 23, 1936, *supra,* requesting that that ordering clause be eliminated from the order. The petition for rehearing alleges that the matters which the Commission was requested to determine in this proceeding were in no way related to the matters which the Commission has under consideration in Case No. 8428 (13 P.U.R.(N.S.) 113) (rates); that the effect of the condition (ordering Clause No. 7) is to prohibit the company from fulfilling lawful obligations and the directors from exercising their rights and discharging the duties as prescribed by law, and that the action of the Commission in imposing this condition

was beyond its power and jurisdiction and unauthorized by any provision of law.

This is a most unusual application. The company accepted the order as passed and issued the securities as authorized. Good faith requires that it comply with the terms of the accepted order. If it wished to raise any question regarding the order or any provision thereof, it should have raised such question before it accepted the order and issued the securities. But when it accepted the order, no exceptions were taken to any part of it. The company should not, over ten days after the securities have actually passed into the hands of others, attempt to have a part of the order set aside. If it could not in good faith accept the order in its entirety, it should have filed its protest and application for a rehearing then and there. The company is well aware that after securities have passed into the hands of innocent purchasers, they cannot be recalled. Quite obviously, the company intended to take advantage of the authority granted and ignore the conditions it did not want to comply with. Must the Commission proceed to deal with public utilities upon the basis that an unconditioned acceptance cannot be considered as made in good faith?

If the company had notified the Commission that it could not comply with the terms of the order in good faith because it considered certain provisions as beyond its power to impose and had requested a rehearing, the case would be entirely different. Companies should understand that when they accept an order, they must comply with its terms and that they are not at liberty to comply with a part of the order and refuse to comply with another part. If they do not wish to accept the order and follow it out in good faith because they disagree with some provisions thereof, they should notify the Commission of such a fact and should not accept the order.

The request for rehearing should be denied.

All concur.

Industrial Progress

Johns-Manville Plans Large Expansion Program

REFLECTING a constantly increasing volume of business, particularly in the building materials line, Johns-Manville Corporation has authorized the expenditure of $3,420,000 for additional manufacturing, mining and operating facilities. This appropriation is in addition to about $3,500,000 spent for additions and betterments during 1936.

Manufacturing activities of the Corporation and its subsidiaries are carried on at nine plants in the United States, one plant in Canada and one plant in Belgium. Its principal lines include roofings and a variety of building materials, insulation materials for service in industry where the conservation of heat or cold is desired and for use in buildings, friction materials for the automotive industry and for industrial uses, acoustical materials for the control of sound, and packings for industrial operating equipment. Other lines include diatomaceous earth products, materials for road and bridge construction, asbestos-cement pipe for water distribution systems and various industrial uses, certain products for the electrical industry and asbestos fibre.

Harvester Company Promotes Sales Executives

THREE managerial promotions in the sales department of International Harvester Company have been announced by C. R. Morrison, vice-president. The changes are: the appointment of J. L. McCaffrey, former manager of domestic sales, as director of domestic and Canadian sales; appointment of W. F. McAfee, former manager of domestic motor truck sales, to succeed Mr. McCaffrey as manager of domestic sales; and appointment of P. V. Moulder, former assistant manager of the Eastern district, to succeed Mr. McAfee as manager of domestic motor truck sales.

$13,500,000 Construction for Consumers Power Co.

THE Consumers Power Company plans to spend $13,500,000 for construction and improvement work in Michigan during 1937, according to Dan E. Karn, vice-president and general manager.

Engineering estimates for the work and approval of the expenditures call for an appropriation of $11,820,000 in the electric department. Of this sum, $4,044,000 will be used to build new power plants to accommodate the rapidly rising demand for power, and $3,706,000 has been set aside for the construction of new rural lines. It is estimated that $1,017,000 will be used in the gas department. About $27,000 will be required for the heating department, while approximately $600,000 will go for such general items as buildings, furniture and fixtures, and for automotive equipment.

The company contemplates an increase of 21,200 electric customers and 10,700 gas customers during the current year. This will bring the total number of electric customers to 385,600 and gas to 193,000. It is estimated that 1937 will see Consumers Power Company extend approximately 2,780 miles of rural line to connect nearly 16,000 new rural customers.

During 1936, electrical energy generated or purchased by the company amounted to 1,489,221,708 kilowatt hours, and the company looks for an increase of 280,652,292, to a total of 1,769,874,000 for 1937. In the gas department, the company manufactured and purchased 8,360,663,000 cubic feet and estimates call for an increase of 1,260,092,000 cubic feet to a total of 9,457,474,000 for 1937.

Increase Utility Demand for Steam Power Equipment

THE demand for new steam power equipment from such companies as Babcock & Wilcox Company and Combustion Engineering Company, Inc., has expanded to such extent within the last few months that deliveries on large special contracts cannot be promised in less time than a year, according to the *Wall Street Journal*. This stringency has developed, not through a lack of production facilities, but because of heavy demands upon the engineering staffs of the leading producers. Orders for standard equipment, which do not require special engineering, can be filled as usual.

Fuel equipment of all kinds has been experiencing increasing demand over the past year, with the rate speeded up considerably in the last several months. Reports of large outlays planned for public utility central station work indicate several years of large contracts from this source. Advances in the technology of steam power engineering have encouraged many industrial plants to go ahead with modernization programs.

Ideal Commutator Dresser Buys Marshall Electric Company

THE Ideal Commutator Dresser Company, Sycamore, Illinois, manufacturers of quality electrical products, announce the acquisition of the Marshall Electric Company of Elkhart, Indiana, manufacturers of automatic regulators for voltage, current and speed control of electrical equipment. The plant of the Marshall Electric Company at Elkhart is the only one of its kind devoted exclusively to the

manufacture of automatic voltage regulators.

Operations of the acquired company will be transferred as rapidly as possible to Sycamore and consolidated with the main office, production, engineering, research and development departments of the Ideal Commutator Dresser Company. The Marshall Electric Company is an old, established concern, which occupies a leading position in the field of automatic voltage, current and speed control regulating equipment.

The Marshall regulator patents are all included in the purchase, and the Ideal Commutator Dresser Company will continue to manufacture and develop the full line.

Appliance Sales Increased by Ohio Fuel Gas Company

APPLIANCE sales of the Ohio Fuel Gas Company reached an all-time record in 1936, according to M. K. McKelvey, district sales manager.

The total volume of appliance business increased more than 67 per cent over 1935. All types of gas equipment, including ranges, refrigerators, commercial and house heating equipment and water heaters showed gains.

Supporting the sales program during the past year was an extensive newspaper advertising campaign which was conducted in more than 140 newspapers in Ohio.

The company is engaged in a sales campaign on automatic storage gas heaters in which they are competing with other utilities in a national sales contest.

Electric Utility Industry Sets All-Time Records

POWER output during the last year exceeded the 100 billion mark for the first time in history. Production by water power was 37 billion kilowatt-hours, by fuels was 69 billions and power imported and purchased from other sources, 3 billions; making a total output for the industry of 109 billion kilowatt-hours, according to the Edison Electric Institute. This constitutes an increase of 14½ per cent over the figures for the previous year and of 56 per cent over 1926.

Total construction expenditures for 1936 were estimated at $275,000,000, a gain of 43 per cent over 1935. Plans now under way provide for the adding of considerable generating capacity in 1937 and 1938. Generating capacity at the close of 1936 was estimated at 34,076,000 kw of which 9,410,000 kw, or 28 per cent, was in water power stations, 24,026,000 kw in steam stations and 640,000 kw in internal combustion engine plants.

The industry has been conducting such national promotional programs as the "Better Light-Better Sight" coöperative sales program, the "Electrical Housewares" and the rural "Running Water" campaigns. Another forward-looking activity, the "Kitchen Modernizing" program to popularize the all-electric kitchen and to promote kitchen planning is under way. These campaigns are supported by all branches of the electrical industry and other interested agencies.

More than 26,100,000 customers are now receiving electric service. This represents an increase of nearly 800,000 customers during the year and a gain of 6,000,000 during the past ten years. Of the customers newly connected during 1936, about 96,000 were farms.

It is estimated that 915,000 farms were supplied with electricity at the end of 1936, or about 14 per cent of all farms having occupied dwellings and 21 per cent of all farms which had dwellings valued at more than $500.

The post-war growth of electricity used in the home continued during the past year. The annual residential use per customer in 1936 (excluding farms) was 719 kilowatt-hours, or 7 per cent above the 669 consumed by these customers in 1935. The annual revenue per kilowatt-hour for residence use continued downward to 4.69 cents, compared with 4.99 cents in 1935, or a decrease of 6 per cent. At the close of the year, the unit cost of electricity in the average home was 46 per cent below 1913, as contrasted with the cost of living which was 44 per cent above 1913.

Cleveland Electric League Extends Services

AN important extension of services of the Electrical League of Cleveland through creation of a new electrical homes bureau is announced by J. E. North, president of the league.

This new bureau, composed of electrical experts, will provide consultation service, free of charge, to home builders or prospective home builders as well as to architects and contractors and will check electrical specifications if requested.

The league has set up standards for the "modern 6-point electrical home" which include: adequate wiring, sight-saving lighting, step-saving kitchen, labor-saving laundry, winter air conditioning and exterior protective lighting.

Predicts Utility Borrowing for Plant Expenditures

THE decision of the North American Company and the American Water Works & Electric Company—top units of two of the largest utility organizations in the country—to register with the Federal Securities and Exchange Commission under the utility holding company act of 1935 was greeted in Wall Street as a prelude to extensive financing, including some borrowing for plant expenditures, according to Frederick Gardner, of the Associated Press.

Outdistancing other recovery barometers, weekly consumption of electricity went above 2,000,000,000 kilowatt hours in 1936 and stayed there, reaching a level about 16 per cent above the 1929 peak.

Except for a temporary depression halt, the power industry saw its customers continue to

Toncan Iron Protects

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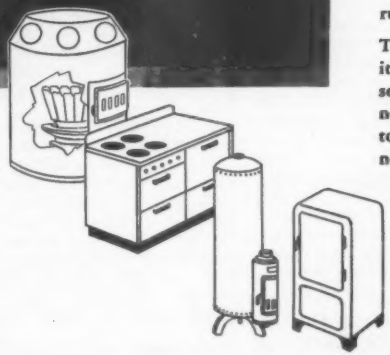

● When 65 to 70 tons of sheets and plates are required for an installation, it's important that the "right" metal be used in order to insure long life and protection of the investment.

That's why Toncan Iron was selected and used for this 500,000 cubic foot gas holder—it's the "right" metal to use for lasting service and low maintenance cost.

This alloy of refined open-hearth iron, copper and molybdenum offers greater resistance to rust than any other ferrous material in its price class—makes Toncan Iron the economical material in the long run for most types of structures.

The complete story of Toncan Iron—why it resists corrosion, how well it performs in service and how easy it is to fabricate with no material effect on its rust-resistance—is told and illustrated in "The Path to Permanence." A copy will be sent upon request.

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Republic produces a sheet for every degree of corrosion-resistance—plain carbon steel, copper-bearing steel, copper-bearing iron, Toncan Copper Molybdenum Iron and Enduro Stainless Steel.

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multiply. It has emerged from depression with more than 26,000,000 against 24,150,000 in 1929, about 20,000,000 ten years ago and less than 4,000,000 in 1912.

However, there was a lag in construction expenditures. Faced with the new peak in power consumption, the 1936 outlay was put at $275,000,000 compared with a low of $129,000,000 in 1933, a peak of more than $900,000,000 in 1930 and a yearly average of $50,000,000 since 1921.

With settlement of overhanging litigation and the TVA issue, Wall Street counts on a more normal spending pace to quicken the flow of orders to makers of electric equipment, copper, steel and construction supplies generally.

Utility men see the Nation demanding more power. Home use has been stimulated by record sales of electric refrigerators, washing machines and other appliances. Rural electrification has become more important. Farm use of electricity contributed the biggest percentage gain last year.

International Business Machines Finds Recovery World-Wide

A WORLD emerging from the depression created by the Great War of a generation ago was depicted in the comments of delegates from nineteen countries in North and South America, Australasia, Europe, and Asia to the International Business Machines Corporation's recent convention in New York.

In almost every instance, a reduction of unemployment is reported. Only three Continental countries reported more unemployment in the first half of 1936 than they had in the corresponding 1935 period, and each of them showed a notable increase in employment in the last three months of 1936, according to J. E. Holt, European general manager.

In Austria unemployment was reduced last year by 100,000 or 33 per cent. Germany faces a substantial problem to find skilled labor or even likely subjects for training. In England, also, there is a shortage of mechanics in industry. In Sweden, on the contrary, where there has been practically no unemployment for several years, there is a particular shortage of office workers. Countries where new industries are being fostered also naturally feel a lack of skilled labor. In this class, Brazil, Mexico, Australia, and China are examples.

Two Illinois Utilities Plan $17,300,000 Expenditure

PLANT expenditures of $17,300,000 are scheduled for this year by the Commonwealth Edison Company and the Public Service Company of Northern Illinois.

Of this total the Edison budget accounts for $12,800,000 and that of Public Service of Northern Illinois for $4,500,000. Both amounts are substantially in excess of the expenditures for 1936.

Appliance Sales Increase

SALES of electric clocks last year mounted 30 per cent over sales for 1935, according to *Electrical Merchandising*.

A total number of 3,000,000 clocks, with a retail value of $12,000,000 were sold. Two million electrical refrigerators were distributed against 1,568,000 in 1935, and sales of vacuum cleaners jumped to 1,488,251 from 1,200,940. Flashlights sold aggregated 7,200,000 against 6,000,000 the year before, while battery sales numbered 175,000,000 against 165,000,000 in 1935.

$22,000,000 Expenditures by Connecticut Utilities

PUBLIC utilities companies in Connecticut will spend more than $22,000,000 for plant and equipment improvement this year, compared with approximately $10,000,000 in 1936, according to estimates. The largest budget is that of the Southern New England Telephone Company, with a $7,000,000 improvement program, against $4,000,000 in 1936.

Other utilities' budgets for 1937 include Connecticut Light and Power, $5,027,099; Hartford Electric Light, $3,900,000; Bridgeport Hydraulic Company, $2,000,000; Connecticut Power Company, $1,304,786; Derby Gas and Electric Company, $260,000; New Haven Gas Company, $137,120; Hartford Gas Company, $110,000, and Litchfield Electric, $61,620.

Domestic Stoker Sales Show Marked Increase

PROGRESS is clearly discernible in every phase of operation in the coal mining industry, according to *Coal Age*. Production is up; underground mechanization has registered further marked gains; mechanical cleaning looms large in preparation-plant installation records; fatality rates promise to hit a new low.

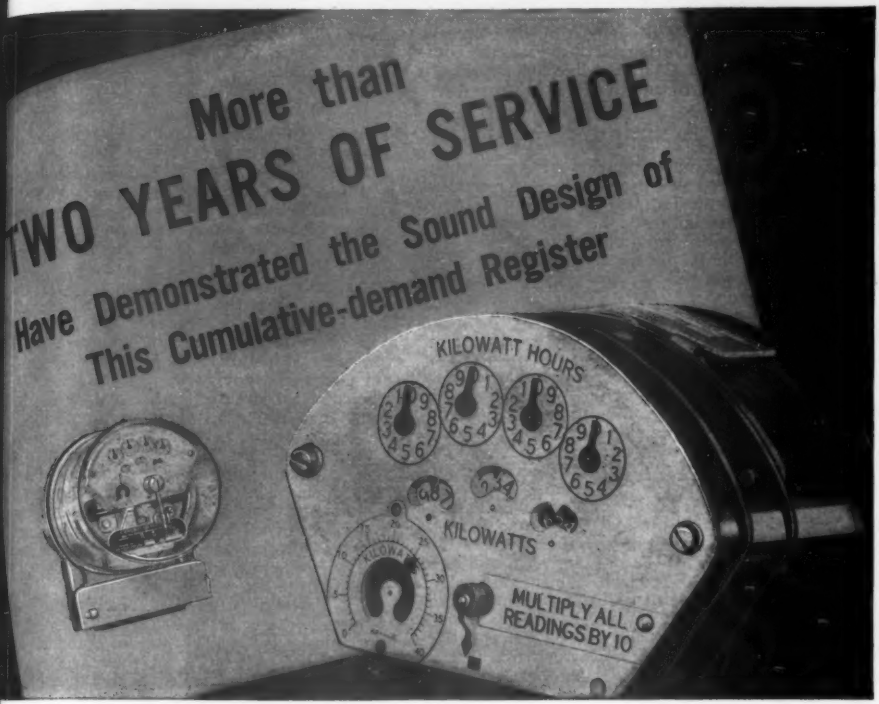
Output of bituminous increased 17 per cent and anthracite 5 per cent during the last year.

Sales of stoker and pulverized-coal-firing units are showing marked increases. Small stokers are in the van of the upsurge, installation of domestic and small commercial heating services rising to an estimated total of 80,500 in 1936, an increase of about 82 per cent over the 1935 total of 44,288 units. In comparison, shipments of all classes of oil burners in 1936 were only 40 per cent over 1935.

West Penn Power Plans New Load Campaign

THE 1937 load building campaign launched by the West Penn Power Company is designed to keep the Pittsburgh utility in front as the company having made the greatest gain in total power output since the depression.

Industrial sales, street lighting, domestic lighting, cooking, refrigeration, water heating and rural electrification are stressed in the



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Telechron Motor Timing

The high torque of the Telechron motor (an improved type) permits the use of high torques and safety factors throughout the design of the register.

Reset Mechanism

Follow-up resetting principle is used. Full torque of motor is available automatically if needed to insure positive reset. This gives double protection against faulty reset and high demand.

Mechanical Design

All bearings are permanently located. Corrosion-resisting materials are used throughout. The heavy plates are rigidly spaced and locked. The strength and quality of construction will immediately impress you.

ONLY two years ago a new development—today the M-21 demand-meter register ranks as time tested and proved.

With the M-21 register a reading is preserved for one entire month after it was originally taken. All during this month it is available for verification. This puts the reading and recording of demands on the same basis as kilowatt-hours.

The design of this M-21 register is based on the well-known M-20. And those essential features which have made the latter so satisfactory have been retained. In addition you get the cumulative-reading feature.

If you have not seen or used this type of demand-meter register, be sure to get in touch with your nearest G-E sales office for further information, or write to the General Electric Company, Dept. 6A-201, Schenectady, N.Y.

AVAILABLE FOR FOLLOWING G-E WATTHOUR METERS, TYPES I-14, I-16, I-18, I-20, D-6, D-7, D-14, D-15, DS, IS-6, DS-19, DS-20, AND V 2.

410-44E

GENERAL ELECTRIC

company's load building program. Approximately $600,000 will be spent on development of rural lines. During the last year, the company spent $670,278 in new line construction to serve 3,707 new customers.

Increases Aluminum Production

THE Aluminum Company of America has announced that it will increase production of aluminum at its plant in Alcoa, Tennessee. The company indicated the increase was made possible by Federal Judge J. Gore's decision at Knoxville permitting the Tennessee Valley Authority to sell the company power from Norris dam.

For Your Information

RALPH C. Coxhead Corporation has issued a folder presenting the 1937 Mathematon calculating machine. The new model Mathematon, which eliminates or performs automatically many of the functions necessary to the operating of the ordinary calculating machine, is equipped with a number of new exclusive features for division. Among the public utilities using the Mathematon are Brooklyn Borough Gas Company, Consolidated Edison Company of N. Y., Inc., Consolidated Telegraph & Electrical Subway Company, Hartford Electric Light Company, Kings County Lighting Company, Nassau & Suffolk Lighting Company, New York & Queens Electric Light & Power Company, Northern Union Gas Company, Public Service Gas & Electric Company and Queens Borough Gas & Electric Company.

Demonstration of the Mathematon may be arranged by writing the Ralph C. Coxhead Corp., 17 Park Place, New York, New York.

THE Mercoid Corporation has issued its general abridged catalogue No. 100-D, covering Mercoid automatic controls for heating, air conditioning, refrigeration and industrial applications.

Every Mercoid control, it is pointed out, operates through permanently clean enclosed contacts by means of the Mercoid switch, an exclusive product of the Mercoid Corporation. The Mercoid switch is a hermetically sealed glass tube containing inert gases and mercury —totally unaffected by open arcing, oxidation or corrosion.

Thermostats for room temperature control, relays, electric time switches, pressure limit controls, warm air furnace controls, lever arm and float-operated controls, and temperature limit controls of the direct-connected and remote stem types are fully described and illustrated. Combination pressure and low water controls, low water cut-outs, boiler feed water pump control, as well as controls for stokers, oil burners, and dampers are included in the descriptive material. The Mercoid's line of magnetic valves for controlling oil, water, air, gas and steam and the various types of refrigeration controls also are shown in this new abridged catalogue. A copy may be obtained from The Mercoid Corporation, 4201 Belmont Avenue, Chicago, Illinois.

THE ELECTRIC LIGHT AND POWER INDUSTRY IN THE UNITED STATES. Statistical Bulletin No. 4, Publication No. E2. Edison Electric Institute, New York, N. Y. 48 pages, 8½ by 11 inches, 47 tables, 11 charts. 30 cents to members, 75 cents to non-members.

The great extension of the use of electricity in the United States during the past ten years is presented in detail in this annual Statistical Bulletin, the most comprehensive yet published. It contains the records of the principal operations of the electric light and power companies, together with those of the municipal plants and covers the period since 1926, when the collection of national data was begun. In addition to showing the historical summary for the period 1926 to 1936 for the source and disposal of energy, the relation of generation and generating facilities and interconnection facilities, the report contains a complete analysis of each of the several major classes of service rendered. Financial statistics of the industry appear in the Bulletin for the first time, including an income statement for the years 1932-1935.

The Bulletin shows that all classes of the industry's customers purchased 15.3 per cent more electricity in 1936 than in 1935 but paid only 7.7 per cent more for their service last year than in the preceding twelve months.

PROXIMATE COAL ANALYSES. By William C. MacQuown. Coal Information Bureau, Inc., Lessee, Pittsburgh, Pa. 100 pages, size 6¼ by 10¼ inches, $5.00.*

This publication contains proximate coal analyses on the majority of the mines in the United States, alphabetically arranged by the name of the mine, followed in each instance with the following data—location of mine (county and state), operator, name and address of selling agents, date and origin of analyses, as well as data on the condition of the sample, size, and seam, followed by the proximate analysis (moisturem volatile, carbon, and ash) together with sulphur, british thermal units, and fusing point of the ash. An alphabetical list of coal operators is also included showing the names and location of mines (county and state), to be used in locating the name of mine when operator only is known.

Data is included on the description of the ultimate and proximate analyses of coal and method used to determine the proximate analysis, to collect the sample, prepare the sample for analysis, and make the proximate coal analysis.

Any special or private analyses can be listed in the same publication on ruled blank sheets.

*Furnished free with each order for a copy of "Mac's Coal Directory and Buyers Guide" at $10.00.

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There's *pipe pioneering* in the multiple extruded outlets, short 90° bends and complicated structure of the prefabricated unit shown above. Its specifications were typical of the many that bring one answer to the minds of engineers . . . "a job for Grinnell!"

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Anyone who knows anything about business knows that the query which heads this advertisement is Foolish Question No. 1.

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Business *lives* by people—by people like "you and me"—for people are the market for the things Business produces and sells.

Folks in business *are* people—weary and energetic, worried and hopeful people—customers of other businesses—even as you and I.

That's all very well, you may say, for the majority of businesses, but how about the big ones—the special privilege stuff and all—how about that?

Okeh, let us ask you: what great business do you know that grew big *without having customers,* what business can stay big unless it continues to *please* the customers it has?

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The bigger a business, *the more stake it has in seeing the average man prosper.*

The bigger a business, *the more vital it is that it have customers with the buying power, after paying for food, shelter and clothing, to afford the other things business has for sale.*

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This advertisement is published by

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INDEX TO ADVERTISERS

(Concluded on Page 80)

INDEX TO ADVERTISERS (Concluded)

PROFESSIONAL DIRECTORY

This page is reserved for engineers and engineering concerns especially equipped by experience and trained personnel to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, design and construction.

4, 19

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